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86	AA72	5,131,014	07/1992	V	/hite				<u></u>
	AB72	6,393,070 B1	05/2002	R	eber				
	AC72	7,016,663 B2	03/2006	s	orrelis <i>et al.</i>		_		
	AD72	3,694,754	09/1972	В	altzer				
	AE72	4,931,716	06/1990	Jo	ovanovic et al.				
	AF72	3,617,898	11/1971	Ja	anning, Jr.				
·	AG72	3,764,921	10/1973	н	uard				
	AH72	4,158,149	06/1979	0	tofuji				
4	A172	4,380,828	04/1983	М	loon				
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54	AA73	4,562,414	12/1985	Linder et al.			
	AB73	4,814,649	03/1989	Young			
	AC73	4,845,389	07/1989	Pyndiah et al.	_		
	AD73	5,172,019	12/1992	Naylor et al.			
	AE73	5,263,198	11/1993	Geddes et al.	-		
	AF73	5,551,076	08/1996	Bonn			
50	AG73	5,633,610	05/1997	Maekawa et al.			
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Page 1 of 3 ATTY. DOCKET NO. 1744.0020007 APPLICATION NO. 10/086,367 FIRST NAMED INVENTOR David F. SORRELLS

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543	AE69	5,703,584	12/1997	Н				
	AF69	5,887,001	03/1999	R	tussell			
	AG69	6,298,065 B1	10/2001	D	ombkowski et al.			
-	AH69	2002/0080728 A1	06/2002	s	ugar <i>et al</i> .			
803	Al69	2002/0163921 A1	11/2002	E	thridge et al.			
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[ Sep	AJ24	WO 98/53556 A2	11/1998		PCT			N/A
	AK24	DT 1936252	01/1971		DT			Yes (Doc. AO60)
d	AL24	JP 62-12381	01/1987		JP			No
147	AM24	JP 4-154227	05/1992		JP			No
		OTHER DOCUMENTS	S (Including	) Aut	hor, Title, Date, Perti	nent Pages,	etc.)	
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96	AN60	Gaudiosi, J., "Retailers Volume 23, Issue 36, po			oft's Xbox with games and tember 2-8, 2001).	d peripherals,"	Video Store I	Magazine,
	AO60				Patent Publication No. DT pary 28, 1971 - Date of pu			led by
	AP60	English-language Abstr 1 page (January 21, 198	act of Japane 87 - Date of p	ese Pa	atent Publication No. JP 6 ation of application).	52-12381, data	supplied by t	he espacenet,
	AQ60	English-language Abstr 1 page (May 27, 1992 -			atent Publication No. JP 4 n of application).	l-154227, data	supplied by t	he espacenet,
G	AR60	English-language Abstra 1 page (October 7, 1994	act of Japane 4 - Date of pu	ese Pa	atent Publication No. JP 6 tion of application).	3-284038, data	supplied by t	the espacenet,

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## FOURTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

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az.	AA70	6,963,734 B2	11/2005	Sc	orrells et al.			,
	AB70	6,005,506	12/1999	Ba	azarjani et al.			
	AC70	6,438,366 B1	08/2002	Li	ndfors et al.			
	AD70	5,196,806	03/1993	Icl	hihara			
	AE70	5,410,195	04/1995	Icl	hihara			-
	AF70	6,404,823 B1	06/2002	G	range et al.			
	AG70	6,618,579 B1	09/2003	Sr	mith et al.			
•	AH70	2001/0015673 A1	08/2001	Ya	amashita et al.			
50	A170	2003/0045263 A1	03/2003		akayama et al.			
		F	OREIGN PA	TEI	NT DOCUMENTS			
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B	AJ25	JP 6-284038	10/1994		JP			No
	AK25	JP 10-96778	04/1998		JP			No
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m	AN61	English-language Abstra 1 page (April 14, 1998 -	ct of Japanese Date of publica	e Paration	tent Publication No. JP 10-96 of application).	778, date	supplied by t	he espacenet,
az	AO61	English-language Abstra 1 page (April 9, 1999 - D	ct of Japanese ate of publicat	Pa ion o	tent Publication No. JP 11-98 of application).	205, data	supplied by t	he espacenet,
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Page 3 of 3 ATTY, DOCKET NO. APPLICATION NO. **FORM PTO-1449** 1744.0020007 10/086,367 FIRST NAMED INVENTOR FOURTH SUPPLEMENTA David F. SORRELLS INFORMATION DISCLOSURE STATES **FILING DATE ART UNIT** March 4, 2002 2688 **U.S. PATENT DOCUMENTS EXAMINER** DOC. **DOCUMENT NUMBER** DATE NAME CLASS SUB-CLASS FILING DATE INITIAL REF. 12/2005 **AA71** 6,975,848 B2 Rawlins et al. 83 AB71 6,404,758 B1 06/2002 Wang AC71 6,909,739 B1 06/2005 Eerola et al. 06/2005 AD71 6,910,015 B2 Kawai 03/1973 AE71 3,719,903 Goodson AF71 4.591,930 05/1986 **Baumeister** 02/2006 **AG71** 7,006,805 B1 Sorrells et al. 12 AH ΑI **FOREIGN PATENT DOCUMENTS EXAMINER** DOC. DATE COUNTRY **TRANSLATION DOCUMENT NUMBER CLASS** SUB-CLASS INITIAL REF. Yes ΑJ No Yes ΑK No Yes AL No Yes AM No OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.) EXAMINER INITIAL DOC. CITATION REF. AN AO AP AQ AR **EXAMINER** DATE CONSIDERED 4/28/06 EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance

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Page 1 of 2 ATTY. DOCKET NO. 1744.0020007 FIRST NAMED INVENTOR APPLICATION NO. 10/086,367

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Sp	AA68	5,014,130	05/1991	Heister et al.			
	AB68	5,390,215	02/1995	Anita et al.			
	AC68	5,805,460	09/1998	Greene et al.			
	AD68	6,882,194 B2	04/2005	Belot et al.			
	AE68	6,892,062 B2	05/2005	Lee et al.			
	AF68	6,917,796 B2	07/2005	Setty et al.			
	AG68	6,920,311 B2	07/2005	Rofougaran et al.			
	AH68	5,062,122	10/1991	Pham et al.			
99	Al68	6,182,011 B1	01/2001	Ward			
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R	AA69	6,639,939 B1	10/2003	Naden et al.			
	AB69	5,787,125	07/1998	Mittel			
	AC69	5,878,088	03/1999	Knutson et al.			•
59	AD69	6,215,828	04/2001	Signell et al.			
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ATTY. DOCKET NO. APPLICATION NO. 1744.0020007 10/086,367

FIRST NAME INVENTOR

David F. Sorrells
FILING DATE ART UNIT
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Page 3 of 4 APPLICATION NO. 10/086,367 ATTY. DOCKET NO. 1744.0020007 FIRST NAME INVENTOR David F. Sorrells ART UNIT FILING DATE

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8/3	AA66	5,634,207	05/1997	Yamaji et al.			
- X	AB66	5,642,071	06/1997	Sevenhans et al.			i)
.:	AC66	6,211,718 B1	04/2001	Souetinov			
	AD66	6,212,369 B1	04/2001	Avasarala			
	AE66	6,308,058 B1	10/2001	Souetinov et al.			
-	AF66	6,633,194 B2	10/2003	Amborg et al.			_
	AG66	2001/0036818 A1	11/2001	Dobrovolny			
	AH66	6,873,836 B1	03/2005	Sorrells et al.			
503	Al66	6,879,817 B1	04/2005	Sorrells et al.			
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	AO	<u>59</u>	English Transla	tion of Gern	nan Patent Publication No	. DE 196 48 9	15 A1, 10 pa	iges.
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	AB56	6,608,647	08/2003	King		RI	CEIVE
	AC56	6,687,493 B1	02/2004	Sorrells et al.			1
	AD56	6,694,128 B1	02/2004	Sorrells et al.			AN 0 4 200
	AE56	6,031,217	02/2000	Aswell et al.			ology Center
<del>\</del>	AF56	5,955,992	09/1999	Shattil			
<u> </u>	AG56	5,999,561	12/1999	Naden et al.			
1	AH56	6,686,879 B2	02/2004	Shattil			
98	AI56	6,704,549 B1	03/2004	Sorrells et al.			
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_	AA57			Sorrells et al.	100.00	005 05 00	1.5
2/3	AASI	6,704,558 B1	03/2004	Sorrells et al.			
4	AB57	5,490,176	02/1996	Peltier		HE	CEIVE
	AC57	5,970,053	10/1999	Schick et al.		J	AN 0 4 2005
	AD57	6,078,630	06/2000	Prasanna		Techno	logy Center 2
	AE57	6,600,911 B1	07/2003	Morishige et al.			
	AF57	5,179,731	01/1993	Tränkle et al.			
	AG57	5,589,793	12/1996	Kassapian			
	AH57	4,510,467	04/1985	Chang et al.			
DAS _	AI57	4,772,853	09/1988	Hart			
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94	AA58	4,972,436	11/1990	Halim et al.		RE	CEIVE
	AB58	5,012,245	04/1991	Scott et al.			
	AC58	5,422,909	06/1995	Love et al.		J/	N 0 4 2005
	AD58	5,440,311	08/1995	Gallagher et al.		Techno	ogy Center 2
	AE58	5,926,513	07/1999	Suominen et al.			
	AF58	5,995,030	11/1999	Cabler			
	AG58	6,047,026	04/2000	Chao et al.			
	AH58	6,049,573	04/2000	Song			
50	AI58	6,076,015	06/2000	Hartley et al.			
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5/3	AA59	6,144,331	11/2000	Jiang			
	AB59	6,018,553	01/2000	Sanielevici et al.			
	AC59	6,317,589 B1	11/2001	Nash			-
	AD59	5,058,107	10/1991	Stone et al.			
	AE59	5,757,858	05/1998	Black et al.			
	AF59	6,531,979 B1	03/2003	Hynes			
	AG59	6,018,262	01/2000	Noro et al.			
	AH59	4,761,798	08/1988	Griswold, Jr. et al.			
50	AI59	5,982,315	11/1999	Bazarjani et al.			- <u> </u>
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50	AA60	6,459,721 B1	10/2002	Mochizuki et al.								
EB	7400	0,400,72101	10,2002	Woodinzaki et al.								
	AB60	6,151,354	11/2000	Abbey		RE	CEIVE					
	AC60	6,169,733 B1	01/2001	Lee	,		AN 0 4 2005					
	AD60	6,363,262 B1	03/2002	McNicol		Tachno	logy Center					
	AE60	6,697,603 B1	02/2004	Lovinggood et al.		Technic	109) Dome					
	AF60	5,282,222	01/1994	Fattouche et al.								
	AG60	5,949,827	09/1999	DeLuca et al.								
	AH60	6,014,176	01/2000	Nayebi et al.								
SB	Al60	5,678,226	10/1997	Li et al.								
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E13	AA61	5,760,632	06/1998	Kawakami et al.	- CCA33						
1	AB61	6,160,280	12/2000	Bonn et al.		RE					
	AC61	5,481,570	01/1996	Winters			AN 0 4 2005				
	AD61	5,745,846	04/1998	Myer et al.		Techno	logy Center				
	AE61	5,345,239	09/1994	Madni et al.							
	AF61	4,132,952	01/1979	Hongu et al.							
	AG61	5,260,973	11/1993	Watanabe							
<u> </u>	AH61	6,307,894 B2	10/2001	Eidson et al.							
5z	Al61	6,091,289	07/2000	Song et al.	-						
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5/3	AA62	6,437,639 B1	08/2002	Nguyen et al.			
	AB62 AC62	2002/0037706 A1 4,441,080	03/2002	Ichihara Saari			CEIVE
	AD62	4,873,492	10/1989	Myer		JF	N 0 4 2005 ogy Center 2
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	AE62 AF62	5,697,074	12/1997 07/1998	Makikallio et al.			9,
	AG62	5,784,689 6,335,656 B1	01/2002	Kobayashi Goldfarb et al.			
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	AH62	6,690,232 B2	02/2004	Ueno et al.			
50	Al62	5,636,140	06/1997	Lee et al.			l
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28	AA63	6,366,622 B1	04/2002	Brown et al.			
	AB63	6,600,795 B1	07/2003	Ohta et al.		-RE	CEIVE
	AC63	4,250,458	02/1981	Richmond et al.			AN 0 4 2005
	AD63	5,760,629	06/1998	Urabe et al.			
	AE63	6,084,465	07/2000	Dasgupta		1ecrino	ogy Center 2
	AF63	6,204,789 B1	03/2001	Nagata			
	AG63	6,064,054	05/2000	Waczynski et al.			
	AH63	5,218,562	06/1993	Basehore et al.			
5/3	Al63	5,239,496	08/1993	Vancraeynest			
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82	AA64	5,896,304	04/1999	Tiemann et al.			
	AB64	6,005,903	12/1999	Mendelovicz		DEC	EIVE
	AC64	5,834,979	11/1998	Yatsuka			
	AD64	6,798,351 B1	09/2004	Sorrells et al.		JAL	0 4 2005
	AE64	6,813,485 B2	11/2004	Sorrells et al.		-Technolo	gy Center 2
	AF64	5,410,270	04/1995	Rybicki et al.			
5n	AG64	6,509,777 B2	01/2003	Razavi et al.			
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TH	AA1	2,05	57,613	10/19	936	Gard	iner			CEP	VED_
	AB4~	2,24	1,078	05/19	941	Vree	land	<	<del></del>	<u> </u>	9 1 1
	AC1	2,27	70,385	01/19	942	Skill	man			FC 1-5	2003
	AD1	2,28	33,575	05/1	942	Robe	erts				
	AE1	2,35	8,152	09/19	944	Earp	<u> </u>		-Tech	hology Ce	nter 2600
	AF1	2,41	10,350	10/19	946	Labi	n et al.				
	AG1	2,45	51,430	10/19	948	Baro	ne				<u> </u>
	AH1	2,46	2,069	02/19	949	Chat	terjea et al.				
90	Al1	2,46	52,181	02/19	949	Gros	selfinger				
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Sp	AJ1 DE 42 37 692 C1				03/1994		DE				No
	AK1	EP (	0 035 166 A1		09/1981		EP	-			No
	AL1	EP	0 193 899 B1	93 899 B1			EP .	-			N/A
Ch	AM1	EP (	0 380 351 A2		08/1990		EP				N/A
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46	AN	1	Aghvami, H. (Fourth International 153 (October	ational	Conference	e Satel e on Sa	llites Using the Highly Elliptic atellite Systems for Mobile Co	: Orbits- ommunic	The UK cations a	T-SAT Mobi and Navigation	le Payload," on, IEE, pp. 147-
	AO	1	Akers, N.P. e 49 (January 1		RF Sampling	g Gate	s: a Brief Review," <i>IEE Proc</i> e	eedings,	IEE, Vo	il. 133, Part <i>F</i>	A, No. 1, pp. 45-
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	AQ	1	Ali, I. <i>et al.</i> , "[ 46, No. 3, pp.				for LEO Satellites," IEEE Tr	ansactio	ns on C	ommunicatio	ns, IEEE, Vol.
gh!	AR	1	Allan, D.W., " Stability, IEEE	Statisl	ics of Atomi 221-230 (Fe	c Freq	uency Standards," <i>Proceedi</i> 1966).	ings Of 1	The IEEE	Special (ss	ue on Frequency
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50	AA2	2,47	2,798	06/19	949	Fred	endall	V			
	AB2	2,49	7,859	02/19	950	Bou	ghtwood et al.		B	ECE	
	AC2	2,49	9,279	02/19	950	Pete	rson				V L D
	AD2	2,80	2,208	08/19	957	Hobi	os			DEC 1.5	2003
	AE2	2,98	5,875	05/19	961	Griso	dale et al.				
	AF2	3,02	3,309	02/19	962	Foul	kes		Tech	hology C	nter 2600
	AG2	3,06	9,679	12/19	962	Swe	eney et al.				
	AH2	3,10	4,393	09/19	963	Voge	elman		-		
Sp	Al2	3,11	4,106	12/19	963	McM	anus			<u> </u>	
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EB	AJ2	EP 0	380 351 A3		02/1991		EP				N/A
	AK2	EP 0	EP 0 411 840 A2		02/1991		EP	-			N/A
	AL2	EP 0	411 840 A3		07/1991		EP				N/A
- Gh	AM2	EP 0	411 840 B1		10/1995 EP					N/A	
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90	AN	2	Alistot, D.J. e SC-13, No. 6,	<i>t al.</i> , "l pp. 8	MOS Switche 06-814 (Dece	ed Ca embei	pacitor Ladder Filters,* r 1978).	IEEE Journ	al of Solid	d-State Circu	its, IEEE, Vol.
	AO	2	Allstot, D.J. a Filtering Syste	nd Bla ems,"	ick Jr. W.C., <i>Proceeding</i> s	"Tech of the	nological Design Consi DIEEE, IEEE, Vol. 71, N	iderations fo	or Monolit 67-986 (A	hic MOS Swi ugust 1983).	tched-Capacitor
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	AQ	<u>2</u>		n a Tu	irbulent Atmo	spher	ase Distortions of Keye e," <i>Telecommunication</i> 3).				
FB	AR	<u>2</u>	Antonetti, A. e Publishing Co	et al., ' empan	"Optoelectror y, Vol. 21, No	nic Sa o. 2, p	mpling in the Picosecor p. 211-214 (May 1977)	nd Range," ).	Optics Co	ommunication	ns, North-Holland
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ATTY. DOCKET NO. APPLICATION NO. 1744.0020007 10/086,367 FORM PTO-1449 **APPLICANTS** Sorrells et al. ATION DISCLOSURE STATEMENT GROUP FILING DATE March 4, 2002 2682 **U.S. PATENT DOCUMENTS EXAMINER** DOCUMENT DATE NAME CLASS SUB-FILING DATE INITIAL NUMBER CLASS AA3 01/1964 3,118,117 King et al. AB3 3,226,643 12/1965 McNair AC3 3,258,694 06/1966 Shepherd AD3 3,383,598 05/1968 Sanders DEC 1|5 2003 05/1968 AE3 3,384,822 Miyagi 07/1969 Perreault AF3 3,454,718 lechnology/Center 2600 AG3 3,523,291 08/1970 **Pierret** AH3 3,548,342 12/1970 Maxey m AI3 3,555,428 01/1971 Perreault FOREIGN PATENT DOCUMENTS **EXAMINER** INITIAL DOCUMENT NUMBER DATE COUNTRY **CLASS** SUB-TRANSLATION **CLASS** AJ3 04/1991 EP N/A EP 0 423 718 A2 AK3 08/1992 EP N/A EP 0 423 718 A3 N/A AL3 EP 0 486 095 A1 05/1992 EP N/A **АМ3** EP 0 486 095 B1 02/1997 EP Sh OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Austin, J. et al., "Doppler Correction of the Telecommunication Payload Oscillators in the UK T-SAT," 18th European Microwave Conference, Microwave Exhibitions and Publishers Ltd., pp. 851-857 (September 12 - 15, AN 3 1988). Auston, D.H., "Picosecond optoelectronic switching and gating in silicon," Applied Physics Letters, American AO <u>3</u> Institute of Physics, Vol. 26, No. 3, pp. 101-103 (February 1, 1975). Baher, H., "Transfer Functions for Switched-Capacitor and Wave Digital Filters," IEEE Transactions on Circuits AP 3 and Systems, IEEE Circuits and Systems Society, Vol. CAS-33, No. 11, pp. 1138-1142 (November 1986). Baines, R., "The DSP Bottleneck," IEEE Communications Magazine, IEEE Communications Society, pp. 46-54 AQ 3 (May 1995). Banjo, O.P. and Vilar, E., "Binary Error Probabilities on Earth-Space Links Subject to Scintillation Fading," *Electronics Letters*, IEE, Vol. 21, No. 7, pp. 298-297 (March 28, 1985). AR <u>3</u>

**EXAMINER**: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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ATTY. DOCKET NO. APPLICATION NO. 1744.0020007 10/086,367 FORM PTO-1449 APPLICANTS Sorrells et al. ATION DISCLOSURE STATEMENT FILING DATE GROUP March 4, 2002 2682 **U.S. PATENT DOCUMENTS EXAMINER** CLASS INITIAL DOCUMENT DATE NAME SUB-FILING DATE NUMBER **CLASS** AA4 3,617,892 11/1971 Hawley et al. AB4 3,621,402 11/1971 Gardner AC4 3,623,160 11/1971 Giles et al. AD4 3,626,417 12/1971 Gilbert AE4 3,629,696 12/1971 **Bartelink** AF4 05/1972 Gans et al. 3,662,268 AG4 3,689,841 09/1972 Bello et al. AH4 3,714,577 01/1973 Hayes Al4 3,717,844 02/1973 Barret et al. **FOREIGN PATENT DOCUMENTS EXAMINER** INITIAL DOCUMENT NUMBER DATE COUNTRY CLASS SUB-TRANSLATION CLASS AJ4 EP 0 512 748 A2 11/1992 EP N/A yo AK4 EP 0 512 748 A3 07/1993 EP N/A AL4 EP 0 512 748 B1 11/1998 FP N/A gr. AM4 EP 0 548 542 A1 06/1993 EP N/A OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Banjo, O.P. and Vilar, E., "The Dependence of Slant Path Amplitude Scintillations on Various Meteorological AN 4 Parameters," Fifth International Conference on Antennas and Propagation (ICAP 87) Part 2: Propagation, IEE, pp. 277-280 (March 30 - April 2, 1987). Banjo, O.P. and Vilar, E. "Measurement and Modeling of Amplitude Scintillations on Low-Elevation Earth-Space AO 4 Paths and Impact on Communication Systems," IEEE Transactions on Communications, IEEE Communications Society, Vol. COM-34, No. 8, pp. 774-780 (August 1986). Banjo, O.P. et al., "Tropospheric Amplitude Spectra Due to Absorption and Scattering in Earth-Space Paths," AP 4 Fourth International Conference on Antennas and Propagation (ICAP 85), IEE, pp. 77-82 (April 16-19, 1985). Basili, P. et al., "Case Study of Intense Scintillation Events on the OTS Path," IEEE Transactions on Antennas AQ 4 and Propagation, IEEE, Vol. 38, No. 1, pp. 107-113 (January 1990). Basili, P. et al., "Observation of High C2 and Turbulent Path Length on OTS Space-Earth Link," Electronics AR 4 Letters, IEE, Vol. 24, No. 17, pp. 1114-1116 (August 18, 1988). **EXAMINER DATE CONSIDERED** 

APPLICATION NO. ATTY. DOCKET NO. 1744.0020007 10/086,367 FORM PTO-1449 DEC - 1 1 2003 **APPLICANTS** Sorrells et al. ION DISCLOSURE STATEMENT GROUP FILING DATE March 4, 2002 2682 **U.S. PATENT DOCUMENTS EXAMINER** CLASS SUB-**FILING DATE** INITIAL DOCUMENT DATE NAME CLASS NUMBER AA5 3,735,048 05/1973 Tomsa et al. AB5 3,806,811 04/1974 Thompson AC5 3,868,601 02/1975 MacAfee AD5 Sadler 3,949,300 04/1976 AE5 06/1976 Batz 3,967,202 5 2003 AF5 09/1976 **Bickford** 3,980,945 AG5 3,987,280 10/1976 Bauer chnology Center 2600 Hirata AH5 3,991,277 11/1976 w AI5 01/1977 Snijders et al. 4,003,002 FOREIGN PATENT DOCUMENTS **EXAMINER** TRANSLATION INITIAL DOCUMENT NUMBER DATE COUNTRY **CLASS** SUB-CLASS 01/1995 EP N/A AJ5 EP 0 632 288 A2 Un N/A AK5 EP 0 632 288 A3 07/1996 EP N/A 02/1996 EP AL5 EP 0 696 854 A1 N/A 07/1997 AM5 EP 0 782 275 A2 EP 9M OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Blakey, J.R. et al., "Measurement of Atmospheric Millimetre-Wave Phase Scintillations in an Absorption AN <u>5</u> Region," Electronics Letters, IEE, Vol. 21, No. 11, pp. 486-487 (May 23, 1985). Burgueño, A. et al., "Influence of rain gauge integration time on the rain rate statistics used in microwave AO communications," annales des télécommunications, International Union of Radio Science, pp. 522-527 <u>5</u> (September/October 1988). Burgueño, A. et al., "Long-Term Joint Statistical Analysis of Duration and Intensity of Rainfall Rate with Application to Microwave Communications," Fifth International Conference on Antennas and Propagation (ICAP AP 5 87) Part 2: Propagation, IEE, pp. 198-201 (March 30 - April 2, 1987). Burgueño, A. et al., \*Long Term Statistics of Precipitation Rate Return Periods in the Context of Microwave AQ Communications," Sixth International Conference on Antennas and Propagation (ICAP 89) Part 2: Propagation, <u>5</u> IEE, pp. 297-301 (April 4-7, 1989). Burgueño, A. et al., "Spectral Analysis of 49 Years of Rainfall Rate and Relation to Fade Dynamics," IEEE AR Transactions on Communications, IEEE Communications Society, Vol. 38, No. 9, pp. 1359-1366 (September <u>5</u> 1990). **EXAMINER DATE CONSIDERED** 28/06 **EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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	AB6	4,0	19,140	04/19	977	Swe	rdlow			DEC	
	AC6	4,0	35,732	07/19	977	Lohr	mann			FIE	EVE
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	AK6	EP	0 795 978 A2	09/1997		EP	-			N/A	
	AL6	EP	0 837 565 A1		04/1998		EP				N/A
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	AO	6	Chan, P. et a Conference, I	)., "A H EEE (	lighly Linear Communicati	1-GH on So	z CMOS Downconversion ciety, pp. 210-213 (Septen	Mixer," Ei nber 22-24	uropean 4, 1993).	Solid State C	Circuits
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include dopy of this form with next communication to Applicant.

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AC8	4,35	5,401	10/19	982	lkom	a et al.			RECE	- [ ] - [ ]
AD8	4,35	6,558	10/19	982	Owe	n et al.	-			
AE8	4,36	0,867	11/19	982	Gond	ta			DEC-1	5 2003
AF8	4,36	3,132	12/19	982	Colli	<u> </u>				0
AG8	4,36	5,217	12/19	982	Berg	er et al.		<u></u>	ennology	Center 2000
AH8	4,37	0,572	01/19	983	Cosa	and et al.		<del></del>		
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AK8	JP 2	P 2-131629 A		05/1990		JP			·	No
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AM8	WO 80/01633 A1			08/1980		PCT				N/A
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AQ	<u>8</u>	DIALOG File 18, 1981 - Da	348 (E	European Pateublication of	tents) applic	English Language Pater ation).	it Abstract f	or EP 35	i166 A1, 2 pa	ges (February
AR	<u>8</u>	"DSO takes s	amplir	ng rate to 1 G	Shz," <i>E</i>	Electronic Engineering, N	forgan Grai	npian Pi	ublishers, Vol	. 59, No. 723, pp
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	AA8 AB8 AC8 AD8 AE8 AF8 AG8 AH8 AH8 AH8 AN8 AAR AAR AAR AAR AAR AAR AAR AAR AAR AA	DOC NUM  AA8 4,324 AB8 4,344 AC8 4,356 AB8 4,366 AF8 4,366 AF8 4,366 AH8 4,381  DOC AJ8 JP 2 AK8 JP 2 AK8 JP 2 AK8 JP 2 AM8 WO  AN 8  AO 8  AP 8  AO 8	DOCUMENT NUMBER  AA8	DOCUMENT NUMBER  AA8	DOCUMENT NUMBER	U.S. PATEN  DOCUMENT NUMBER  AA8	DOCUMENT   DATE   NAME	DOCUMENT   DATE   NAME   CL	DOCUMENT   DATE   NAME   CLASS	Narch 4, 2002   2692

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	AB9	4.4	30,629	02/1	984	Betzi et al.				RFCI	コハノアハ
	AC9	4,4	46,438	05/1	05/1984		ng et al.				
	AD9	4,45	56,990	06/1	984	Fish	er et al.			DEC-1	5 2003
	AE9	4,47	72,785	09/19	984	Kası	ла				
	AF9	4,47	79,226	10/19	984		hu et al.		<u>le</u>	cinology	Center 2500
	AG9	4,48	31,490	11/1	984	Hun	ley				7-110-2000
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7	AK9	wo	WO 96/02977 A1		02/1996		РСТ				N
	AL9	wo	96/08078 A1		03/1996		PCT				N
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	AN	9	Erdi, G. and I	lenne	use, P.R., */	A Prec	itle, Date, Pertinent Pa ision FET-Less Sample- rcuits, IEEE, Vol. SC-13	-and-H	old with High	Charge-to-D	roop Current
m	AO	9	Faulkner, N.D	). and EEE 1	Vilar, E., "Se	ubharr	nonic Sampling for the Natrumentation and Meas	Measu	rement of Sho	ort Term Stat	bility of Microway
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	AC10		4,504,803		03/1985		Lee et al.				
		4.517	4,517,519		05/1985		Mukaiyama				
	AD40	4,517		05/1985		Ogawa				RECE	ライドフ
1 1	AD10	4,518,935		05/1985		van Roermund					100000
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	AF10	4,563,773		07/1986		Dixon, Jr. et al.					
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		•	OTHE	R (Inc	luding Aut	hor, T	tle, Date, Pertinent Pag	jes, etc.)			
Ste	AN 10 Fukahori, K., "A CMOS Narrow-Band Signaling Filter with Q Reduction," <i>IEEE Journal of Solid-State Circuits</i> , IEEE, Vol. SC-19, No. 6, pp. 926-932 (December 1984).										
	AO	10	Fukuchi, H. and Otsu, Y., "Available time statistics of rain attenuation on earth-space path," <i>IEE Proceedings-H: Microwaves, Antennas and Propagation</i> , IEE, Vol. 135, Pt. H, No. 6, pp. 387-390 (December 1988).								
	АР	<u>10</u>	Gibbins, C.J. and Chadha, R., "Millimetre-wave propagation through hydrocarbon flame," <i>IEE Proceedings</i> , IEE, Vol. 134, Pt. H, No.2, pp. 169-173 (April 1987).								
	AQ	<u>10</u>	Gilchrist, B. et al., "Sampling hikes performance of frequency synthesizers," <i>Microwaves &amp; RF</i> , Hayden Publishing, Vol. 23, No. 1, pp. 93-94 and 110 (January 1984).								
523	Gossard, E.E., "Clear weather meteorological effects on propagation at frequencies above 1 Ghz," Radio Science, American Geophysical Union, Vol. 16, No. 5, pp. 589-608 (September - October 1981).										
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1	AB11	4.60	03,300	07/1986		Welles, II et al.						
	AC11	4,61	12,464	09/19	986	Ishikawa et al.			FCF	MED		
	AD11	4,61	12,518	09/1	986 Gan		ans et al.				, -, ., . <del>, . , </del>	
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	AF11	4,62	21,217	11/19	986	Saxe	Saxe et al.			<del></del>		
	AG11	4,62	28,517	12/1	986	Schwarz et al.				inology C	enter 2600	
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	AL11	DE:	35 41 031 A1		05/1986		DE				Yes (See AR50)	
50	AM11	EP (	0 732 803 A1	303 A1 09/			EP				Yes (See AN51)	
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E'3	AO	<u>11</u>	941-966 (Aug	al., "U	183). 	Tech	itor Circuit Design," Pro					
	AP	11	Grove, W.M., "Sampling for Oscilloscopes and Other RF Systems: Dc through X-Band," IEEE Transactions on Microwave Theory and Techniques, IEEE, pp. 629-635 (December 1966).									
	AQ	11	Haddon, J. et al., "Measurement of Microwave Scintillations on a Satellite Down-Link at X-Band," Antennas and Propagation, IEE, pp. 113-117 (1981).									
43	AR	11	Haddon, J. ar Paths and the 34, No. 5, pp.	Influe	ence of Anter	nna Ap	nduced Microwave Scin perture," IEEE Transact	itillations	from Clear A Antennas and	Air and Rain o	on Earth Space 7, IEEE, Vol. AP-	
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**EXAMINER** 

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7, pp. 789-796 (July 1988).

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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

Hewitt, A. and Vilar, E., "Selective fading on LOS Microwave Links: Classical and Spread-Spectrum

Measurement Techniques," IEEE Transactions on Communications, IEEE Communications Society, Vol. 36, No.

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ATTY. DOCKET NO. APPLICATION NO. 1744.0020007 10/086,367 FORM PTO-1449 APPLICANTS Sorrells et al. RMATION DISCLOSURE STATEMENT TA TRADES FILING DATE GROUP March 4, 2002 2682 U.S. PATENT DOCUMENTS **EXAMINER** DOCUMENT INITIAL DATE NAME **CLASS** FILING DATE SUR-NUMBER **CLASS AA13** 4,737,969 04/1988 Steel et al. **AB13** 4,743,858 05/1988 Everard **AC13** 4,745,463 05/1988 Lu **AD13** 4,751,468 06/1988 Agoston 2003 AE13 4,757,538 07/1988 Zink **AF13** 4,768,187 **Technology** 08/1988 Marshall <del>benter zoou</del> **AG13** 4,769,612 09/1988 Tamakoshi et al. **AH13** 4,785,463 11/1988 Janc et al. Al13 4,791,584 12/1988 Greivenkamp, Jr. **FOREIGN PATENT DOCUMENTS EXAMINER** INITIAL **DOCUMENT NUMBER** DATE COUNTRY **CLASS** TRANSLATION SUB-CLASS **AJ13** EP 0 817 369 A2&A3 01/1998 ΕP AK13 WO 91/18445 A1 11/1991 PCT **AL13** WO 99/23755 A1 05/1999 PCT UB **AM13** JP 56-114451 A 09/1981 JP OTHER (Including Author, Title, Date, Pertinent Pages, etc.) 45 Hospitalier, E., "Instruments for Recording and Observing Rapidly Varying Phenomena," Science Abstracts, IEE, AN <u>13</u> Vol. VII, pp. 22-23 (1904). Howard, I.M. and Swansson, N.S., "Demodulating High Frequency Resonance Signals for Bearing Fault Detection," The Institution of Engineers Australia Vibration and Noise Conference, Institution of Engineers, AO <u>13</u> Australia, pp. 115-121 (September 18-20, 1990). AP <u>13</u> 64 (1995).

Hu, X., A Switched-Current Sample-and-Hold Amplifier for FM Demodulation, Thesis for Master of Applied Science, Dept. of Electrical and Computer Engineering, University of Toronto, UMI Dissertation Services, pp. 1-Hung, H-L. A. et al., "Characterization of Microwave Integrated Circuits Using An Optical Phase-Locking and AQ <u>13</u> Sampling System," IEEE MTT-S Digest, IEEE, pp. 507-510 (1991). Hurst, P.J., "Shifting the Frequency Response of Switched-Capacitor Filters by Nonuniform Sampling," IEEE AR <u>13</u> Transactions on Circuits and Systems, IEEE Circuits and Systems Society, Vol. 38, No. 1, pp. 12-19 (January 1991).

**EXAMINER** w

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ATTY. DOCKET NO. 1744.0020007

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85	AA14	4,801,823			Yok	okoyama						
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	AG14	4,833,445	05/1	989		Buchele		-101	<del>HIIIOIOGY I</del>	Center 2600		
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	AK14	JP 8-139524 A		05/1996		JP				No		
	AL14	JP 59-144249 A	08/1984		JP	-			No			
- 643	AM14	M14 JP 63-54002 A		03/1988		JP				No		
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Sp	AN	IEE Proceed	ings C	ircuits, Devic	es an	ulse width on the frequency cl d Systems, IEE, Vol. 141, No	. 4, pp. 3.	28-336	(August 199	4).		
	AO	14 Fundamenta 1950).	Janssen, J.M.L., "An Experimental 'Stroboscopic' Oscilloscope for Frequencies up to about 50 Mc/s: I. Fundamentals," <i>Philips Technical Review</i> , Philips Research Laboratories, Vol. 12, No. 2, pp. 52-59 (August 1950).									
	АР	<u>14</u>   Mc/s: II. Elec	Janssen, J.M.L. and Michels, A.J., "An Experimental 'Stroboscopic' Oscilloscope for Frequencies up to about 50 Mc/s: II. Electrical Build-Up," <i>Philips Technical Review</i> , Philips Research Laboratories, Vol. 12, No. 3, pp. 73-82 (September 1950).									
	AQ	Jondral, V.F. June 1996).	Jondral, V.F. et al., "Doppler Profiles for Communication Satellites," Frequenz, Herausberger, pp. 111-116 (May June 1996).									
83	AR	Kaleh, G.K., "A Frequency Diversity Spread Spectrum System for Communication in the Presence of In-band Interference," 1995 IEEE Globecom, IEEE Communications Society, pp. 66-70 (1995).										
XAMINER	M	sen	-	<del></del>	-		DATE (	ONSI	DERED /	1/28/66		

Page 15 of 58 ATTY. DOCKET NO. APPLICATION NO. 1744.0020007 10/086,367 FORM PTO-1449 APPLICANTS Sorrells et al. TION DISCLOSURE STATEMENT FILING DATE GROUP March 4, 2002 2682 **U.S. PATENT DOCUMENTS EXAMINER** DOCUMENT DATE NAME INITIAL **CLASS** SUB-**FILING DATE** NUMBER **CLASS** 50 **AA15** 4,870,659 09/1989 Oishi et al. **AB15** 4,871,987 10/1989 Kawase AC15 4,885,587 12/1989 Wiegand et al. AD15 4,885,756 12/1989 Fontanes et al. DEC-1 5 2003 AE15 4,888,557 12/1989 Puckette, IV et al. AF15 4,890,302 Muilwijk 12/1989 Fedhnology Center 2500 **AG15** 4,893,316 01/1990 Janc et al. **AH15** 4,893,341 01/1990 Gehring Sn AI15 4,894,766 01/1990 De Agro **FOREIGN PATENT DOCUMENTS EXAMINER DOCUMENT NUMBER** DATE COUNTRY INITIAL **CLASS** SUB-TRANSLATION **CLASS AJ15** JP 6-237276 A 08/1994 JP No **AK15** JP JP 8-23359 A 01/1996 No AL15 JP 47-2314 A 02/1972 JP Yes (Doc. AP53) 53 **AM15** JP 58-7903 A 01/1983 JP Partial | (Doc. AQ53) OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Karasawa, Y. et al., "A New Prediction Method for Tropospheric Scintillation on Earth-Space Paths," IEEE AN <u> 15</u> Transactions on Antennas and Propagation, IEEE Antennas and Propagation Society, Vol. 36, No. 11, pp. 1608-1614 (November 1988). Kirsten, J. and Fleming, J., "Undersampling reduces data-acquisition costs for select applications," *EDN*, Cahners Publishing, Vol. 35, No. 13, pp. 217-222, 224, 226-228 (June 21, 1990). AO <u>15</u> Lam, W.K. et al., "Measurement of the Phase Noise Characteristics of an Unlocked Communications Channel AP Identifier," Proceedings Of the 1993 IEEE International Frequency Control Symposium, IEEE, pp. 283-288 (June <u>15</u> 2-4, 1993). Lam, W.K. et al., "Wideband sounding of 11.6 Ghz transhorizon channel," Electronics Letters, IEE, Vol. 30, No. ΑQ <u>15</u> 9, pp. 738-739 (April 28, 1994). 50 Larkin, K.G., "Efficient demodulator for bandpass sampled AM signals," Electronics Letters, IEE, Vol. 32, No. 2, AR <u> 15</u> pp. 101-102 (January 18, 1996).

**EXAMINER**: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

DATE CONSIDERED

28/66

**EXAMINER** 

Techniques Society, Vol. MTT-23, No. 6, pp. 461-469 (June 1975).

AR

16

Linnenbrink, T.E. et al., "A One Gigasample Per Second Transient Recorder," IEEE Transactions on Nuclear Science, IEEE Nuclear and Plasma Sciences Society, Vol. NS-26, No. 4, pp. 4443-4449 (August 1979).

**DATE CONSIDERED** 

**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

**EXAMINER** 

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ATTY. DOCKET NO. 1744.0020007

APPLICATION NO. 10/086,367

**APPLICANTS** Sorrells et al.

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	AD17	4,97	70,703	11/1	990	Hari	haran <i>et al.</i>				
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50	AM17	JP 7	7-307620 A		11/1995		JP				No
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5g	AN	<u>17</u>	Liou, M.L., "A IEEE, Vol. 71	Tutor , No. 8	ial on Compi 3, pp. 987-10	uter-A 105 (A	ided Analysis of Switched ugust 1983).	d-Capacil	or Circuit	s," <i>Proceeding</i>	s of the IEEE,
	AO	17	Lo, P. et al., " (March 26, 19	Coher 180).	rent Automat	ic Gai	n Control," <i>IEE Colloquiu</i>	m on Phe	ese Locke	ed Techniques	IEE, pp. 2/1-2/6
	АР	17					uced Scintillations on Sa ennas and Propagation (				
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SB	AR	17	Madani, K. an Techniques, II	d Aith EEE N	ison, C.S., */ /licrowave TI	A 20 C	Shz Microwave Sampler, and Techniques Society,	* <i>IEEE Tr</i> . Vol. 40, i	ansaction No. 10, p <sub>i</sub>	s on Microwa o. 1960-1963 (	re Theory and October 1992).
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AJ18	JP 55-6605	7 A	05/1980		JP ·	,			•
AK18	JP 63-6558	7 A	03/1988		JP				٨
AL18	JP 63-1536	91 A	06/1988		JP				^
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		OTHER (Inc	cluding Auth	nor. Ti	tle. Date. Pertinent Pa	ages, etc.)		<u>'</u>	
AN	18 Marsi	and, R.A. et a te of Physics,	/., *130 Ghz ( Vol. 55, No.	GaAs 6, pp.	monolithic integrated ci 592-594 (August 7, 19	ircuit samplin 189).	g head,	* Appl. Phys. (	Lett., American
AO	18 Martin	n, K. and Sedr its and Systen	a, A.S., "Swi 18, IEEE Circ	tched- cuits ar	Capacitor Building Bloomd Systems Society, Vo	cks for Adapti ol. CAS-28, N	ve Syst o. 6, pp	ems," <i>IEEE T</i> 5. 576-584 (Ju	ransactions on ne 1981).
АР	18 Tropo	spheric Turbu	lence on Ear	th-Sat	ellite Microwave Links,	" IEEE Trans	actions	on Antennas	to Clear-Air and Propagatio
AQ	18 Matric	cciani, E., "Pre ican Geophysi	ediction of fac cal Union, Vo	te dura ol. 32,	ations due to rain in sat No. 3, pp. 935-941 (Ma	tellite commu ay-June 1997	nication ).	systems," Ra	dio Science,
AR	18 McQi	reen, J.G., "Th	e Monitoring	of Hig	h-Speed Waveforms,	Electronic El	ngineeri	ing, Morgan B	rothers Limited
1		0.17, NO. 250,	pp. 400 441	(00.0	ber 1952).				
	AA18 AB18 AC18 AD18 AF18 AG18 AH18 AH18 AH18 AH18 AA18 AAA18 AAAAAAAAAA	DOCUMEN NUMBER AA18 5,006,810 AB18 5,010,585 AC18 5,014,304 AD18 5,015,963 AE18 5,020,149 AG18 5,020,154 AH18 5,052,050 AI18 5,065,409  DOCUMEN AJ18 JP 63-6558 AL18 JP 63-6558 AL18 JP 63-1536 AM18 EP 0 276 1  AN 18 Marsi Institut  AO 18 Marria  AO 18 Marria  AO 18 Marria  AO 18 Marria	DOCUMENT NUMBER  AA18	DOCUMENT   DATE	U.S. PATEN  U.S. PATEN  DOCUMENT NUMBER  AA18 5,006,810 04/1991 Pope AB18 5,010,585 04/1991 Nicol AD18 5,015,963 05/1991 Nicol AD18 5,015,963 05/1991 Guib AF18 5,020,149 05/1991 Herm AG18 5,020,154 05/1991 Zierh AH18 5,052,050 09/1991 Collie AH18 5,052,050 09/1991 Hugh  FOREIGN PATE  DOCUMENT NUMBER DATE  AJ18 JP 55-66057 A 05/1980  AK18 JP 63-65587 A 03/1988  AL18 JP 63-153691 A 06/1988  AM18 EP 0 276 130 A28A3 07/1988  OTHER (Including Author, Ti  AN 18 Marsland, R.A. et al., "130 Ghz GaAs Institute of Physics, Vol. 55, No. 6, pp.  Marzano, F.S. and d'Auria, G., "Model-Tropospheric Turbulence on Earth-Sat IEEE Antennas and Propagation Socie  AQ 18 Marticciani, E., "Prediction of fade dura American Geophysical Union, Vol. 32, and descriptions of the company of	PILING DATE   NAME	DOCUMENT   DATE   NAME   CL	Marzin d, 2002   GROUT	PILING DATE   GROUP   2682

**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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APPLICATION NO. ATTY. DOCKET NO. 1744.0020007 10/086,367 FORM PTO-1449 **APPLICANTS** Sorrells et al. TION DISCLOSURE STATEMENT FILING DATE GROUP March 4, 2002 2682 **U.S. PATENT DOCUMENTS EXAMINER DOCUMENT** DATE NAME **CLASS** INITIAL SUR. FILING DATE NUMBER CLASS **AA19** 5,083,050 01/1992 Vasile **AB19** 5.091,921 02/1992 Minami AC19 5,095,533 03/1992 Loper et al. **AD19** 5,095,536 03/1992 Loper **AE19** 5,111,152 05/1992 Makino AF19 5,113,094 05/1992 Grace et al. <u>Fechnology Center 2000</u> AG19 5,113,129 05/1992 Hughes **AH19** 5,122,765 06/1992 **Pataut** 7.9 **AJ19** 5,124,592 06/1992 Hagino **FOREIGN PATENT DOCUMENTS EXAMINER** INITIAL **DOCUMENT NUMBER** DATE COUNTRY CLASS SUB-**TRANSLATION** CLASS **AJ19** WO 95/01006 A1 01/1995 PCT N/A **AK19** WO 97/08839 A2&A3 03/1997 PCT N/A AL19 EP 0 254 844 A2 02/1988 EP N/A **AM19** EP 0 632 577 A1 01/1995 N/A 523 OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Merkelo, J. and Hall, R.D., "Broad-Band Thin-Film Signal Sampler," IEEE Journal of Solid-State Circuits, IEEE, Vol. SC-7, No. 1, pp. 50-54 (February 1972). AN <u> 19</u> Merlo, U. et al., "Amplitude Scintillation Cycles in a Sirio Satellite-Earth Link," Electronics Letters, IEE, Vol. 21, AO <u> 19</u> No. 23, pp. 1094-1096 (November 7, 1985). Morris, D., "Radio-holographic reflector measurement of the 30-m millimeter radio telescope at 22 Ghz with a AP cosmic signal source," Astronomy and Astrophysics, Springer-Verlag, Vol. 203, No. 2, pp. 399-406 (September 19 (II) 1988). Moulsley, T.J. et al., "The efficient acquisition and processing of propagation statistics," Journal of the Institution AQ <u> 19</u> of Electronic and Radio Engineers, IERE, Vol. 55, No. 3, pp. 97-103 (March 1985). Ndzi, D. et al., "Wide-Band Statistical Characterization of an Over-the-Sea Experimental Transhorizon Link," IEE 56 AR <u> 19</u> Colloquium on Radio Communications at Microwave and Millimetre Wave Frequencies, IEE, pp. 1/1-1/6 (December 16, 1996). **EXAMINER** DATE CONSIDERED ence 28/06 **EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

Page 20 of 58 ATTY. DOCKET NO. APPLICATION NO. 1744.0020007 10/086,367 FORM PTO-1449 APPLICANTS Sorrells et al. ATION DISCLOSURE STATEMENT FILING DATE GROUP March 4, 2002 2682 **U.S. PATENT DOCUMENTS EXAMINER** DOCUMENT INITIAL DATE NAME **CLASS** SHR FILING DATE NUMBER **CLASS** 5% **AA20** 5,136,267 08/1992 Cabot Kosuga AB20 5,140,705 08/1992 AC20 5,150,124 09/1992 Moore et al. AD20 5,151,661 09/1992 Caldwell et al. 2003 DE-C-1 AE20 5,159,710 10/1992 Cusdin AF20 5,170,414 12/1992 Silvian ednnology Venter 2600 AG20 Hiraiwa et al. 5,172,070 12/1992 AH20 5,191,459 03/1993 Thompson et al. 5/3 A120 5,204,642 04/1993 Ashgar et al. **FOREIGN PATENT DOCUMENTS EXAMINER** INITIAL **DOCUMENT NUMBER** COUNTRY DATE CLASS SUB-TRANSLATION **CLASS** AJ20 07/1985 JP 60-130203 A JP (Doc. AO56) AK20 DE 196 27 640 A1 01/1997 DE No AL20 EP 0 087 336 A1 08/1983 FP No **AM20** EP 0 087 336 B1 24 07/1986 EP No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Ndzi, D. et al., "Wideband Statistics of Signal Levels and Doppler Spread on an Over-The-Sea Transhorizon Link," IEE Colloquium on Propagation Characteristics and Related System Techniques for Beyond Line-of-Sight AN <u>20</u> Radio, IEE, pp. 9/1-9/6 (November 24, 1997). "New zero IF chipset from Philips," Electronic Engineering, United News & Media, Vol. 67, No. 825, p. 10 AO <u>20</u> (September 1995). Ohara, H. et al., "First monolithic PCM filter cuts cost of telecomm systems," Electronic Design, Hayden AP <u>20</u> Publishing Company, Vol. 27, No. 8, pp. 130-135 (April 12, 1979). AQ Oppenheim, A.V. et al., Signals and Systems, Prentice-Hall, pp. 527-531 and 561-562 (1983). <u>20</u> 5.9 Ortgies, G., "Experimental Parameters Affecting Amplitude Scintillation Measurements on Satellite Links," AR <u>20</u>

**EXAMINER** 

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

Electronics Letters, IEE, Vol. 21, No. 17, pp. 771-772 (August 15, 1985).

Page 21 of 58 ATTY. DOCKET NO. APPLICATION NO. 10/086,367 1744.0020007 FORM PTO-1449 **APPLICANTS** Sorrells et al. TION DISCLOSURE STATEMENT GROUP FILING DATE March 4, 2002 2682 **U.S. PATENT DOCUMENTS EXAMINER DOCUMENT** INITIAL DATE NAME CLASS SUB-FILING DATE NUMBER **CLASS AA21** 5,212,827 05/1993 Meszko et al. **AB21** 5,214,787 05/1993 Karkota, Jr. AC21 5,220,583 06/1993 Solomon AD21 5,220,680 06/1993 Lee AE21 5,222,144 06/1993 Whikehart AF21 5,230,097 07/1993 Currie et al. Technology Center 2000 Downey AG21 08/1993 5,239,686 **AH21** 5,241,561 08/1993 Barnard 53 AI21 5,249,203 09/1993 Loper **FOREIGN PATENT DOCUMENTS EXAMINER** INITIAL **DOCUMENT NUMBER** DATE COUNTRY CLASS SUB-TRANSLATION CLASS **AJ21** EP 0 789 449 A2 & A3 08/1997 EP N/A **AK21** FR 2 669 787 A1 05/1992 FR No AL21 GB 2 324 919 A 11/1998 **GB** N/A **AM21** JP 61-30821 A 02/1986 JP No Я OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Pärssinen et al., "A 2-GHz Subharmonic Sampler for Signal Downconversion," IEEE Transactions on Microwave AN <u>21</u> Theory and Techniques, IEEE, Vol. 45, No. 12, 7 pages (December 1997). Peeters, G. et al., "Evaluation of Statistical Models for Clear-Air Scintillation Prediction Using Olympus Satellite Measurements," International Journal of Satellite Communications, John Wiley and Sons, Vol. 15, No. 2, pp. 73-AO 21 88 (March-April 1997). Perrey, A.G. and Schoenwetter, H.K., NBS Technical Note 1121: A Schottky Diode Bridge Sampling Gate, U.S. AP 21 Dept. of Commerce, pp. 1-14 (May 1980). Poulton, K. et al., "A 1-Ghz 6-bit ADC System," IEEE Journal of Solid-State Circuits. IEEE, Vol. SC-22, No. 6. AQ <u>21</u> pp. 962-969 (December 1987). Press Release, "Parkervision, Inc. Announces Fiscal 1993 Results," Lippert/Heilshorn and Associates, 2 Pages AR <u>21</u> (April 6, 1994). **EXAMINER DATE CONSIDERED** EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in

ATTY. DOCKET NO. APPLICATION NO. 1744.0020007 10/086,367 FORM PTO-1449 **APPLICANTS** Sorrells et al. ATION DISCLOSURE STATEMENT FILING DATE GROUP March 4, 2002 2682 **U.S. PATENT DOCUMENTS EXAMINER DOCUMENT** INITIAL DATE NAME CLASS SUR **FILING DATE** NUMBER CLASS **AA22** 5,251,218 10/1993 Stone et al. AB22 5,251,232 10/1993 Nonami AC22 5,260,970 11/1993 Henry et al. AD22 5,263,194 11/1993 Ragan DEC 1 | 5 2003 AE22 11/1993 5,263,196 Jasper AF22 5,267,023 11/1993 Kawasaki rechnology Center 2600 AG22 01/1994 Murphy et al. 5,278,826 AH22 5,282,023 01/1994 Scarpa 50 A122 02/1994 5,287,516 Schaub **FOREIGN PATENT DOCUMENTS EXAMINER** INITIAL **DOCUMENT NUMBER** COUNTRY DATE CLASS SUB-TRANSLATION CLASS AJ22 JP JP 5-327356 A 12/1993 No AK22 EP 0 643 477 A2&A3 03/1995 EP N/A AL22 EP 0 877 476 A1 11/1998 FP N/A AM22 53 EP 0 977 351 A1 02/2000 EP N/A OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Sz Press Release, "Parkervision, Inc. Announces the Appointment of Michael Baker to the New Position of National AN 22 Sales Manager," Lippert/Heilshorn and Associates, 1 Page (April 7, 1994). Press Release, "Parkervision's Cameraman Well-Received By Distance Learning Market," Lippert/Heilshorn and Associates, 2 Pages (April 8, 1994). AO 22 Press Release, "Parkervision, Inc. Announces First Quarter Financial Results," Lippert/Heilshorn and AP 22 Associates, 2 Pages (April 26, 1994). Press Release, "Parkervision, Inc. Announces The Retirement of William H. Fletcher, Chief Financial Officer," AQ <u>22</u> Lippert/Heilshorn and Associates, 1 Page (May 11, 1994). 54 Press Release, "Parkervision, Inc. Announces New Cameraman System II™ At Infocomm Trade Show," AR <u>22</u> Lippert/Heilshorn and Associates, 3 Pages (June 9, 1994). **EXAMINER DATE CONSIDERED** 

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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered...Include copy of this form with next communication to Applicant.

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NUMBER AA24 5,355,114 10/1994 Sutterlin et al.  AB24 5,361,408 11/1994 Watanabe et al.  AC24 5,369,800 11/1994 Takagi et al.  AD24 5,375,146 12/1994 Chalmers  AE24 5,379,040 01/1995 Mizomoto et al.  AF24 5,379,141 01/1995 Thompson et al.  AG24 5,388,063 02/1995 Takatori et al.  AH24 5,390,364 02/1995 Webster et al.  AH24 5,400,084 03/1995 Scarpa  FOREIGN PATENT DOCUMENTS  EXAMINER	UTHAU							rch 4, 2002		ROUP 682		
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ATTY. DOCKET NO. APPLICATION NO. 1744.0020007 10/086,367

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RMATION DISCLOSURE STATEMENT GROUP FILING DATE March 4, 2002 2682 **U.S. PATENT DOCUMENTS EXAMINER** INITIAL **DOCUMENT** DATE NAME CLASS SUB-**FILING DATE** NUMBER CLASS **AA25** 5,404,127 04/1995 ファカ Lee et al. **AB25** 5,410,541 04/1995 Hotto AC25 5,410,743 04/1995 Seely et al. AD25 5,412,352 05/1995 Graham DEC **5** 2003 AE25 5,416,803 05/1995 Janer AF25 5,422,913 06/1995 Wilkinson echnology Center 2600 AG25 5,423,082 06/1995 Cygan et al. **AH25** 5,428,638 06/1995 Cioffi et al. **AI25** 5,428,640 06/1995 Townley **FOREIGN PATENT DOCUMENTS EXAMINER DOCUMENT NUMBER** INITIAL COUNTRY **CLASS** SUB-**TRANSLATION CLASS** AJ Yes No AK Yes No AL Yes No AM Yes No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Press Release, "Parkervision, Inc. Announces Second Quarter and Six Months Financial Results," Parkervision AN <u>25</u> Marketing and Manufacturing Headquarters, 2 Pages (July 31, 1995). Press Release, "Parkervision, Inc. Expands Its Cameraman System II Product Line," Parkervision Marketing AO 25 and Manufacturing Headquarters, 2 Pages (September 22, 1995). Press Release, "Parkervision Announces New Camera Control Technology," Parkervision Marketing and AP <u> 25</u> Manufacturing Headquarters, 2 Pages (October 25, 1995). Press Release, "Parkervision, Inc. Announces Completion of VTEL/Parkervision Joint Product Line," AQ <u>25</u> Parkervision Marketing and Manufacturing Headquarters, 2 Pages (October 30, 1995). Press Release, "Parkervision, Inc. Announces Third Quarter and Nine Months Financial Results," Parkervision AR <u>25</u> Marketing and Manufacturing Headquarters, 2 Pages (October 30, 1995).

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Press Release, "Parkervision, Inc. Announces Private Placement of 800,000 Shares," Parkervision Marketing and Manufacturing Headquarters, 1 Page (April 15, 1996).

Press Release, "Parkervision, Inc. Announces First Quarter Financial Results," Parkervision Marketing and Manufacturing Headquarters, 3 Pages (April 30, 1996).

Press Release, "Parkervision's New Studio Product Wins Award," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (June 5, 1996).

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FORM PTO-1449 INFORMATION DISCLOSURE STATEMENT

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ATTY. DOCKET NO. 1744.0020007	APPLICATION NO. 10/086,367
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Page 29 of 58 ATTY, DOCKET NO. APPLICATION NO. 1744.0020007 10/086,367 FORM PTO-1449 APPLICANTS Sorrells et al. MATION DISCLOSURE STATEMENT FILING DATE GROUP March 4, 2002 2682 **U.S. PATENT DOCUMENTS EXAMINER** INITIAL **DOCUMENT** DATE NAME CLASS SUB-FILING DATE NUMBER **CLASS AA29** 5,495,500 02/1996 Jovanovich et al. **AB29** 5,499,267 03/1996 Ohe et al. AC29 5,500,758 03/1996 Thompson et al. 5,517,688 **AD29** 05/1996 Fajen et al. Pinckley **AE29** 5.519.890 05/1996 AF29 5,523,719 06/1996 Longo et al. Technolohy Center 2600 **AG29** 5,523,726 06/1996 Kroeger et al. **AH29** 06/1996 McEwan 5,523,760 413 **AJ29** 5,539,770 07/1996 Ishigaki FOREIGN PATENT DOCUMENTS **EXAMINER DOCUMENT NUMBER** INITIAL DATE COUNTRY CLASS SUB-TRANSLATION **CLASS** ΑJ Yes No AK Yes No AL. Yes No AM Yes No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Press Release, "Parkervision, Inc. Announces First Quarter Financial Results," Parkervision Marketing and AN <u>29</u> Manufacturing Headquarters, 3 Pages (April 29, 1997). Press Release, "NEC and Parkervision Make Distance Learning Closer," NEC America, 2 Pages (June 18, AO <u>29</u> 1997). Press Release, "Parkervision Supplies JPL with Robotic Cameras, Cameraman Shot Director for Mars Mission," AP <u>29</u> Parkervision Marketing and Manufacturing Headquarters, 2 pages (July 8, 1997). Press Release, "ParkerVision and IBM Join Forces to Create Wireless Computer Peripherals," Parkervision AQ <u>29</u> Marketing and Manufacturing Headquarters, 2 Pages (July 23, 1997). Press Release, "ParkerVision, Inc. Announces Second Quarter and Six Months Financial Results," Parkervision AR 29 Marketing and Manufacturing Headquarters, 3 Pages (July 31, 1997).

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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Page 30 of 58 ATTY. DOCKET NO. APPLICATION NO. 1744.0020007 10/086,367 FORM PTO-1449 APPLICANTS Sorrells et al. NATION DISCLOSURE STATEMENT PRADENT FILING DATE GROUP March 4, 2002 2682 **U.S. PATENT DOCUMENTS EXAMINER** INITIAL **DOCUMENT** DATE NAME **CLASS** SUB-FILING DATE NUMBER **CLASS** B **AA30** 09/1996 5,555,453 Kajimoto et al. **AB30** 5,557,641 09/1996 Weinberg AC30 09/1996 Williams 5,557,642 AD30 5,579,341 11/1996 Smith et al. AE30 5,579,347 11/1996 Lindquist et al. 12/1996 AF30 5,584,068 Mohindra AG30 5,592,131 01/1997 Labreche et al. Technology Center 2640 **AH30** 02/1997 5,602,847 Pagano et al. **AJ30** 5,602,868 02/1997 Wilson **FOREIGN PATENT DOCUMENTS EXAMINER DOCUMENT NUMBER** INITIAL DATE COUNTRY CLASS TRANSLATION SUB-**CLASS** ΑJ Yes No AK Yes No AL Yes No AM Yes No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Press Release, "Parkervision, Inc. Announces Private Placement of 990,000 Shares," Parkervision Marketing AN <u>30</u> and Manufacturing Headquarters, 2 Pages (September 8, 1997). Press Release, "Wal-Mart Chooses Parkervision for Broadcast Production," Parkervision Marketing and ΑO <u>30</u> Manufacturing Headquarters, 2 Pages (October 24, 1997). Press Release, "Parkervision, Inc. Announces Third Quarter Financial Results," Parkervision Marketing and AP <u>30</u> Manufacturing Headquarters, 3 Pages (October 30, 1997). Press Release, "ParkerVision Announces Breakthrough in Wireless Radio Frequency Technology," Parkervision AQ <u>30</u> Marketing and Manufacturing Headquarters, 3 Pages (December 10, 1997).

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Press Release, "Parkervision, Inc. Announces the Appointment of Joseph F. Skovron to the Position of Vice President, Licensing - Wireless Technologies," Parkervision Marketing and Manufacturing Headquarters, 2

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Pages (January 9, 1998).

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Page 31 of 58 ATTY. DOCKET NO. APPLICATION NO. 1744.0020007 DEC: 1 1 2003 10/086,367 FORM PTO-1449 APPLICANTS Sorrells et al. ATION DISCLOSURE STATEMENT GROUP TRADENT FILING DATE March 4, 2002 2682 **U.S. PATENT DOCUMENTS** EXAMINER **DOCUMENT** DATE CLASS INITIAL NAME SUB-FILING DATE NUMBER **CLASS** 40 AA31 5,604,732 02/1997 Kim et al. **AB31** 5,608,531 03/1997 Honda et al. AC31 5,610,946 03/1997 Tanaka et al. AD31 RE 35,494 04/1997 Nicollini AE31 5,617,451 04/1997 Mimura et al. 2003 AF31 5,619,538 04/1997 Sempel et al. AG31 5,621,455 04/1997 Rogers et al. Center 2600 echnology **AH31** 5,630,227 05/1997 Bella et al. 2m AJ31 5,640,415 06/1997 Pandula **FOREIGN PATENT DOCUMENTS EXAMINER** INITIAL DOCUMENT NUMBER DATE COUNTRY **CLASS** TRANSLATION SUB-CLASS AJ Yes No ΑK Yes No AL Yes No **AM** Yes No OTHER (including Author, Title, Date, Pertinent Pages, etc.) Press Release, "Parkervision Announces Existing Agreement with IBM Terminates-- Company Continues with Strategic Focus Announced in December," Parkervision Marketing and Manufacturing Headquarters, 2 Pages AN <u>31</u> (January 27, 1998). Press Release, "Laboratory Tests Verify Parkervision Wireless Technology," Parkervision Marketing and AO <u>31</u> Manufacturing Headquarters, 2 Pages (March 3, 1998). Press Release, "Parkervision, Inc. Announces Fourth Quarter and Year End Financial Results," Parkervision AP <u>31</u> Marketing and Manufacturing Headquarters, 3 Pages (March 5, 1998). Press Release, "Parkervision Awarded Editors' Pick of Show for NAB 98," Parkervision Marketing and AQ <u>31</u> Manufacturing Headquarters, 2 Pages (April 15, 1998). Press Release, "Parkervision Announces First Quarter Financial Results," Parkervision Marketing and AR <u>31</u> Manufacturing Headquarters, 3 Pages (May 4, 1998). **EXAMINER DATE CONSIDERED** 28/66 **EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

Page 32 of 58 ATTY. DOCKET NO. APPLICATION NO. 1744.0020007 10/086,367 FORM PTO-1449 APPLICANTS Sorrells et al. RMATION DISCLOSURE STATEMENT TRADENT GROUP FILING DATE March 4, 2002 2682 **U.S. PATENT DOCUMENTS EXAMINER DOCUMENT CLASS** INITIAL DATE NAME SUB-**FILING DATE** NUMBER CLASS 54 **AA32** 5,640,424 06/1997 Banavong et al. **AB32** 5,640,428 06/1997 Abe et al. AC32 5,640,698 06/1997 Shen et al. AD32 5,648,985 07/1997 Bjerede et al. AE32 07/1997 5,650,785 Rodal 2003 AF32 5,661,424 08/1997 Tang AG32 5,663,878 09/1997 Walker echnology Center 2600 **AH32** 5,663,986 09/1997 Striffler 40 Al32 5,668,836 09/1997 Smith et al. **FOREIGN PATENT DOCUMENTS EXAMINER DOCUMENT NUMBER** DATE COUNTRY **CLASS** SUB-TRANSLATION INITIAL **CLASS** AJ No AK Yes No AL Yes No **AM** Yes No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Press Release, "Parkervision 'DIRECT2DATA' Introduced in Response to Market Demand," Parkervision AN <u>32</u> Marketing and Manufacturing Headquarters, 3 Pages (July 9, 1998). Press Release, "Parkervision Expands Senior Management Team," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (July 29, 1998). AO <u>32</u> Press Release, "Parkervision Announces Second Quarter and Six Month Financial Results," Parkervision AP <u>32</u> Marketing and Manufacturing Headquarters, 4 Pages (July 30, 1998). Press Release, "Parkervision Announces Third Quarter and Nine Month Financial Results," Parkervision AQ <u>32</u> Marketing and Manufacturing Headquarters, 3 Pages (October 30, 1998). 43 Press Release, "Questar Infocomm, Inc. Invests \$5 Million in Parkervision Common Stock," Parkervision AR <u>32</u> Marketing and Manufacturing Headquarters, 3 Pages (December 2, 1998).

128/06 EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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Page 34 of 58 ATTY. DOCKET NO. APPLICATION NO. 1744.0020007 10/086,367 FORM PTO-1449 **APPLICANTS** Sorrells et al. RMATION DISCLOSURE STATEMENT FILING DATE GROUP March 4, 2002 2682 **U.S. PATENT DOCUMENTS EXAMINER** INITIAL DOCUMENT DATE NAME **CLASS** SUB-FILING DATE NUMBER CLASS **AA34** 5,724,002 Sk 03/1998 Hulick **AB34** 5,724,653 03/1998 Baker et al. AC34 5,729,577 03/1998 Chen AD34 5,729,829 03/1998 Talwar et al. AE34 5,732,333 03/1998 Cox et al. AF34 5,736,895 04/1998 Yu et al. AG34 5,737,035 04/1998 Rotzoli **technology** Cemer 2600 **AH34** 5,742,189 04/1998 Yoshida et al. AI34 5,748,683 05/1998 Smith et al. **FOREIGN PATENT DOCUMENTS EXAMINER** INITIAL DOCUMENT NUMBER DATE COUNTRY **CLASS** SUB-TRANSLATION **CLASS** AJ Yes No ΑK Yes No AL Yes No **AM** Yes No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Reeves, R.J.D., "The Recording and Collocation of Waveforms (Part 1)," Electronic Engineering, Morgan AN 53 <u>34</u> Brothers Limited, Vol. 31, No. 373, pp. 130-137 (March 1959). Reeves, R.J.D., "The Recording and Collocation of Waveforms (Part 2)," *Electronic Engineering*, Morgan Brothers Limited, Vol. 31, No. 374, pp. 204-212 (April 1959). AO 34 Rein, H.M. and Zahn, M., "Subnanosecond-Pulse Generator with Variable Pulsewidth Using Avalanche AP <u>34</u> Transistors,\* Electronics Letters, IEE, Vol. 11, No. 1, pp. 21-23 (January 9, 1975). Riad, S.M. and Nahman, N.S., "Modeling of the Feed-through Wideband (DC to 12.4 Ghz) Sampling-Head," AQ <u>34</u> IEEE MTT-S International Microwave Symposium Digest, IEEE, pp. 267-269 (June 27-29, 1978). 1/3 Rizzoli, V. et al., "Computer-Aided Noise Analysis of MESFET and HEMT Mixers," IEEE Transactions on AR <u>34</u> Microwave Theory and Techniques, IEEE, Vol. 37, No. 9, pp. 1401-1410 (September 1989). **EXAMINER** 

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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Page 35 of 58 ATTY. DOCKET NO. APPLICATION NO. 1744.0020007 10/086,367 FORM PTO-1449 APPLICANTS Sorrells et al. RMATION DISCLOSURE STATEMENT GROUP FILING DATE March 4, 2002 2682 **U.S. PATENT DOCUMENTS EXAMINER** INITIAL DOCUMENT DATE NAME CLASS SUB-FILING DATE NUMBER CLASS **AA35** RE 35,829 06/1998 Sanderford, Jr. **AB35** 5,760,645 06/1998 Comte et al. **AC35** 06/1998 Clark 5,764,087 AD35 5,767,726 06/1998 Wang AE35 5,768,118 06/1998 Faulk et al. **ZUU**3 AF35 5,771,442 06/1998 Wang et al. AG35 5,777,692 07/1998 Ghosh technology Center 2600 07/1998 **AH35** 5,777,771 Smith 513 AI35 5,786,844 07/1998 Rogers et al. **FOREIGN PATENT DOCUMENTS EXAMINER** INITIAL **DOCUMENT NUMBER** DATE COUNTRY CLASS SUB-**TRANSLATION CLASS** AJ Yes No AK Yes No AL Yes No AM Yes No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Rowe, H.E., Signals and Noise in Communication Systems, D. Van Nostrand Company, Inc., Princeton, New 5/3 AN <u>35</u> Jersey, including, for example, Chapter V, Pulse Modulation Systems (1965). Rücker, F. and Dintelmann, F., "Effect of Antenna Size on OTS Signal Scintillations and Their Seasonal AO <u>35</u> Dependence," Electronics Letters, IEE, Vol. 19, No. 24, pp. 1032-1034 (November 24, 1983). Russell, R. and Hoare, L., \*Millimeter Wave Phase Locked Oscillators, \* Military Microwaves '78 Conference AP <u>35</u> Proceedings, Microwave Exhibitions and Publishers, pp. 238-242 (October 25-27, 1978). Sabel, L.P., "A DSP Implementation of a Robust Flexible Receiver/Demultiplexer for Broadcast Data Satellite Communications," The Institution of Engineers Australia Communications Conference, Institution of Engineers, AQ 35 Australia, pp. 218-223 (October 16-18, 1990).

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**EXAMINER**: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

I, IEE, Vol. 139, No. 3, pp. 281-288 (June 1992).

Salous, S., "IF digital generation of FMCW waveforms for wideband channel characterization," IEE Proceedings-

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53	AN	<u>36</u>	"Sampling Loc	ops Lo	ock Sources	to 23	Ghz," <i>Microwaves &amp; RF</i> ,	Penton	Publishing	, p. 212 (Sep	tember 1990).
	AO	<u>36</u>	Sasikumar, M. Vol. 71, No. 8,	. et al. . pp. 1	., "Active Co 008-1009 (/	impens August	sation in the Switched-Ca 1983).	apacitor	Biquad," F	Proceedings o	f the IEEE, IEEE,
	AP	<u>36</u>	Saul, P.H., "A ESSCIRC 79,				and Hold Switch," Fifth	Europea	an Solid St	ate Circuits C	onference-
	AQ	<u>36</u>	Shen, D.H. et State Circuits,	al., "A IEEE	v 900-MHZ F Solid-State	RF Fro	nt-End with Integrated Dits Council, Vol. 31, No. 1	iscrete- 12, pp. 1	Time Filteri 1945-1954	ing," IEEE Joi (December 1	urnal of Solid- 996).
53	AR	<u>36</u>	Shen, X.D. and path," Radio S	d Vila	r, E., "Anom e, American	alous Geop	transhorizon propagation hysical Union, Vol. 30, N	and mo	eteorologic ). 1467-147	al processes 9 (Septembe	of a multilink r-October 1995).
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	AC38	5,90	3,187	05/19	999	Clav	erie et al.			ECI	WED
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50	Al38	5,90	3,827	05/19	999	Kenn	an et al.				
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53	AN	<u>38</u>	Stafford, K.R. Vol. SC-9, No	<i>et al.</i> , b. 6, pr	, "A Complete D. 381-387 (D	e Mon )ecem	olithic Sample/Hold Ampli ber 1974).	fier," <i>IEEE</i>	Journal	of Solid-Sta	te Circuits, IEEE,
	AO	<u>38</u>	Staruk, W. Jr. 211, 213, 215	. et al. 5, 217,	, "Pushing H 220 and 222	F Data ? (May	a Rates," <i>Defense Electro</i> 1985).	nics, EW (	Commun	ications, Vol	. 17, No. 5, pp.
	АР	<u>38</u>	Stephenson, pp. 106-110 (	A.G., ' March	Digitizing mu 27, 1972).	ultiple	RF signals requires an op	otimum sar	npling ra	te," Electron	ics, McGraw-Hill,
	AQ	<u>38</u>					e for Statistically Varying f No. 11, pp. 933-938 (Nov			w of Scientifi	ic Instruments,
V3	AR	<u>38</u>	Sylvain, M., *I Union, Vot. 24	Experi 1, No.	mental probii 2, pp. 160-17	ng of i	multipath microwave chan arch-April 1989).	nels," <i>Rad</i>	io Scien	ce, Americar	n Geophysical
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		AO	<u>39</u>	Tan, M.A., "Biquadratic Transconductance Switched-Capacitor Filte Systems- I: Fundamental Theory and Applications, IEEE Circuits at 275 (April 1993).	ers," IEEE Transactions on Circuits and nd Systems Society, Vol. 40, No. 4, pp. 272-
		АР	<u>39</u>	Tanaka, K. et al., "Single Chip Multisystem AM Stereo Decoder IC, Electronics, IEEE Consumer Electronics Society, Vol. CE-32, No. 3	* IEEE Transactions on Consumer 8, pp. 482-496 (August 1986).
		AQ	<u>39</u>	Tawfik, A.N., "Amplitude, Duration and Predictability of Long Hop T Electronics Letters, IEE, Vol. 28, No. 6, pp. 571-572 (March 12, 199	rans-Horizon X-band Signals Over the Sea,* 92).
5	। ठ	AR	<u>39</u>	Tawfik, A.N. and Vilar, E., "Correlation of Transhorizon Signal Leve Meteorological Parameters," <i>Eighth International Conference on An</i> of the IEE, pp. 335-339 (March 30- April 2, 1993).	I Strength with Localized Surface Itennas and Propagation, Electronics Division
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Page 40 of 58 ATTY. DOCKET NO. APPLICATION NO. 1744.0020007 10/086,367 Œ FORM PTO-1449 **APPLICANTS** TAN TRADEN Sorrells et al. NATION DISCLOSURE STATEMENT FILING DATE GROUP March 4, 2002 2682 **U.S. PATENT DOCUMENTS EXAMINER** INITIAL **CLASS DOCUMENT** DATE NAME SHR. FILING DATE NUMBER CLASS 'n **AA40** 4,017,798 04/1977 Gordy et al. AB40 4,032,847 06/1977 Unkauf AC40 4,253,067 02/1981 Caples et al. AD40 4,393,395 07/1983 Hacke et al. AE40 4,816,704 03/1989 Fiori, Jr. AF40 4,841,265 06/1989 Watanabe et al. AG40 4,943,974 07/1990 Motamedi **AH40** 5,115,409 05/1992 Stepp AI40 5,353,306 10/1994 Yamamoto **FOREIGN PATENT DOCUMENTS EXAMINER DOCUMENT NUMBER** DATE INITIAL COUNTRY **CLASS** SUB-TRANSLATION CLASS AJ Yes No ΑK Yes No AL Yes No **AM** Yes No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Tawfik, A.N. and Vilar, E., "Dynamic Structure of a Transhorizon Signal at X-band Over a Sea Path," Sixth 13 ΑN <u>40</u> International Conference on Antennas and Propagation (ICAP 89) Part 2: Propagation, IEE, pp. 446-450 (April 4-7, 1989). Tawfik, A.N. and Vilar, E., "Statistics of Duration and Intensity of Path Loss in a Microwave Transhorizon Sea-AO 40 Path," Electronics Letters, IEE, Vol. 26, No. 7, pp. 474-476 (March 29, 1990). Tawfik, A.N. and Vilar, E., "X-Band Transhorizon Measurements of CW Transmissions Over the Sea- Part 1: AP <u>40</u> Path Loss, Duration of Events, and Their Modeling, IEEE Transactions on Antennas and Propagation, IEEE Antennas and Propagation Society, Vol. 41, No. 11, pp. 1491-1500 (November 1993). Temes, G.C. and Tsividis, T., "The Special Section on Switched-Capacitor Circuits," Proceedings of the IEEE. AQ <u>40</u> IEEE, Vol. 71, No. 8, pp. 915-916 (August 1983). 5/2 AR <u>40</u> Thomas, G.B., Calculus and Analytic Geometry, Third Edition, Addison-Wesley Publishing, pp. 119-133 (1960).

EXAMINER: Initial if reference considered) whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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Page 42 of 58 ATTY. DOCKET NO. APPLICATION NO. 1744.0020007 10/086,367 FORM PTO-1449 APPLICANTS Sorrells et al. MATION DISCLOSURE STATEMENT WADENI & YOU FILING DATE GROUP March 4, 2002 2682 **U.S. PATENT DOCUMENTS EXAMINER** INITIAL DOCUMENT DATE NAME **CLASS** SUB-FILING DATE NUMBER CLASS **5**/3 **AA42** 5,770,985 06/1998 Ushiroku et al. **AB42** 5,778,022 07/1998 Walley AC42 09/1998 5,812,546 Zhou et al. AD42 5,818,869 10/1998 Miya et al. AE42 5,844,449 12/1998 Abeno et al. AF42 5,872,446 02/1999 Cranford, Jr. et al. AG42 5,909,447 06/1999 Cox et al. AH42 08/1999 5,933,467 Sehier et al. 5,952,895 09/1999 A142 McCune, Jr. et al. **FOREIGN PATENT DOCUMENTS EXAMINER** INITIAL **DOCUMENT NUMBER** DATE COUNTRY CLASS SUB-TRANSLATION CLASS ΑJ Yes No AK Yes No AL Yes No AM Yes No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Valdmanis, J.A. et al., "Picosecond and Subpicosend Optoelectronics for Measurements of Future High Speed AN <u>42</u> Electronic Devices," IEDM Technical Digest, IEEE, pp. 597-600 (December 5-7, 1983). van de Kamp, M.M.J.L., "Asymmetric signal level distribution due to tropospheric scintillation," *Electronics Letters*, IEE, Vol. 34, No. 11, pp. 1145-1146 (May 28, 1998). AO <u>42</u> Vasseur, H. and Vanhoenacker, D., "Characterization of tropospheric turbulent layers from radiosonde data," AP 42 Electronics Letters, IEE, Vol. 34, No. 4, pp. 318-319 (February 19, 1998). Verdone, R., "Outage Probability Analysis for Short-Range Communication Systems at 60 Ghz in ATT Urban AQ <u>42</u> Environments," IEEE Transactions on Vehicular Technology, IEEE Vehicular Technology Society, Vol. 46, No. 4, pp. 1027-1039 (November 1997). Vierira-Ribeiro, S.A., Single-IF DECT Receiver Architecture using a Quadrature Sub-Sampling Band-Pass Sigma-Delta Modulator, Thesis for Degree of Master's of Engineering, Carleton University, UMI Dissertation 13 AR 42

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

Services, pp. 1-180 (April 1995).

**EXAMINER** 

ATTY. DOCKET NO. APPLICATION NO. 1744.0020007 10/086,367 FORM PTO-1449 **APPLICANTS** THADEM! Sorrells et al. ION DISCLOSURE STATEMENT <u>info</u>r FILING DATE GROUP March 4, 2002 2682 **U.S. PATENT DOCUMENTS EXAMINER** INITIAL **DOCUMENT** DATE FILING DATE NAME **CLASS** SUB-NUMBER **CLASS AA43** 5,960,033 09/1999 Shibano et al. AB43 6,041,073 03/2000 Davidovici et al. AC43 6,054,889 04/2000 Kobayashi **AD43** 6,084,922 07/2000 Zhou et al. AE43 09/2000 6,125,271 Rowland et al. AF43 6,147,340 11/2000 Levy AG43 11/2000 Steinlechner 6,147,763 **AH43** 6,150,890 11/2000 Damgaard et al. Technology ( enter 2500 Al43 5/4 5,126,682 06/1992 Weinberg et al. **FOREIGN PATENT DOCUMENTS EXAMINER** INITIAL **DOCUMENT NUMBER** DATE COUNTRY **TRANSLATION** CLASS SUB-**CLASS** AJ Yes No AK Yes No AL Yes No AM Yes No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Vilar, E. et al., "A Comprehensive/Selective MM-Wave Satellite Downlink Experiment on Fade Dynamics," Tenth AN International Conference on Antennas and Propagation, Electronics Division of the IEE, pp. 2.98-2.101 (April 14-<u>43</u> 5B 17, 1997). Vilar, E. et al., "A System to Measure LOS Atmospheric Transmittance at 19 Ghz," AGARD Conference AO <u>43</u> Proceedings No. 346: Characteristics of the Lower Atmosphere Influencing Radio Wave Propagation, AGARD, pp. 8-1 - 8-16 (October 4-7, 1983). Vilar, E. and Smith, H., \*A Theoretical and Experimental Study of Angular Scintillations in Earth Space Paths,\* *IEEE Transactions on Antennas and Propagation*, IEEE, Vol. AP-34, No. 1, pp. 2-10 (January 1986). AP <u>43</u> Vilar, E. et al., "A Wide Band Transhorizon Experiment at 11.6 Ghz," Eighth International Conference on AQ <u>43</u> Antennas and Propagation, Electronics Division of the IEE, pp. 441-445 (March 30- April 2, 1993). Vilar, E. and Matthews, P.A., "Amplitude Dependence of Frequency in Oscillators," Electronics Letters, IEE, Vol. AR <u>43</u> 8, No. 20, pp. 509-511 (October 5, 1972). **EXAMINER DATE CONSIDERED** 128/06 EXAMINER: Initial if reference considered whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

ATTY. DOCKET NO. APPLICATION NO. 1744.0020007 10/086,367 FORM PTO-1449 APPLICANTS Sorrells et al. ATION DISCLOSURE STATEMENT PILING DATE GROUP March 4, 2002 2682 **U.S. PATENT DOCUMENTS EXAMINER** INITIAL **DOCUMENT** DATE NAME **CLASS** SUR. **FILING DATE** NUMBER CLASS 5/3 **AA44** 5,841,811 11/1998 Song **AB44** 4,051,475 09/1977 Campbell AC44 5,953,642 09/1999 Feldtkeller et al. AD44 4,653,117 03/1987 Heck Phillips et al. AE44 5,859,878 01/1999 2003 AF44 5,894,496 04/1999 Jones AG44 5,915,278 06/1999 Mallick Tedhnology Center 2000 **AH44** 6,028,887 02/2000 Harrison et al. 58 **AI44** 6,081,691 06/2000 Renard et al. **FOREIGN PATENT DOCUMENTS EXAMINER** INITIAL DOCUMENT NUMBER DATE COUNTRY **CLASS** SUB-TRANSLATION CLASS AJ Yes No AK Yes No AL Yes No AM Yes No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Vilar, E. et al., "An experimental mm-wave receiver system for measuring phase noise due to atmospheric turbulence," Proceedings of the 25th European Microwave Conference, Nexus House, pp. 114-119 (1995). AN 44 Vilar, E. and Burgueño, A., "Analysis and Modeling of Time Intervals Between Rain Rate Exceedances in the Context of Fade Dynamics," *IEEE Transactions on Communications*, IEEE Communications Society, Vol. 39, AO <u>44</u> No. 9, pp. 1306-1312 (September 1991). Vilar, E. et al., "Angle of Arrival Fluctuations in High and Low Elevation Earth Space Paths," Fourth International AP <u>44</u> Conference on Antennas and Propagation (ICAP 85), Electronics Division of the IEE, pp. 83-88 (April 16-19, 1985). Vilar, E., "Antennas and Propagation: A Telecommunications Systems Subject," Electronics Division Colloquium AQ <u>44</u> on Teaching Antennas and Propagation to Undergraduates, IEE, pp. 7/1-7/6 (March 8, 1988). Vilar, E. et al., "CERS". Millimetre-Wave Beacon Package and Related Payload Doppler Correction Strategies," Electronics Division Colloquium on CERS- Communications Engineering Research Satellite, IEE, pp. 10/1-10/10 AR 44 (April 10, 1984). **EXAMINER DATE CONSIDERED** EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

Page 45 of 58 ATTY. DOCKET NO. APPLICATION NO. 1744.0020007 10/086,367 FORM PTO-1449 APPLICANTS Sorrells et al. ATION DISCLOSURE STATEMENT FILING DATE GROUP March 4, 2002 2682 **U.S. PATENT DOCUMENTS EXAMINER** INITIAL DOCUMENT DATE NAME CLASS SUB-FILING DATE NUMBER **CLASS** >% **AA45** 6,121,819 09/2000 Traylor **AB45** 6,144,236 11/2000 Vice et al. AC45 6,144,846 11/2000 Durec AD45 6,175,728 B1 01/2001 Mitama AE45 5,705,949 01/1998 Alelyunas et al. 2003 AF45 5,883,548 03/1999 Assard et al. AG45 4,484,143 11/1984 French et al. Technology Genter 2500 **AH45** 11/1998 5,841,324 Williams 5/2 **AI45** 4,855,894 08/1989 Asahi et al. **FOREIGN PATENT DOCUMENTS EXAMINER** INITIAL DOCUMENT NUMBER DATE COUNTRY **CLASS** SUB-TRANSLATION **CLASS** ΑJ Yes No AK Yes No AL Yes No AM Yes No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Vilar, E. and Moulsley, T.J., "Comment and Reply: Probability Density Function of Amplitude Scintillations." 58 AN <u>45</u> Electronics Letters, IEE, Vol. 21, No. 14, pp. 620-622 (July 4, 1985). Vilar, E. et al., "Comparison of Rainfall Rate Duration Distributions for ILE-IFE and Barcelona," Electronics AO <u>45</u> Letters, IEE, Vol. 28, No. 20, pp. 1922-1924 (September 24, 1992). Vilar, E., "Depolarization and Field Transmittances in Indoor Communications," Electronics Letters, IEE, Vol. 27, AP <u>45</u> No. 9, pp. 732-733 (April 25, 1991). Vilar, E. and Larsen, J.R., "Elevation Dependence of Amplitude Scintillations on Low Elevation Earth Space AQ <u>45</u> Paths," Sixth International Conference on Antennas and Propagation (ICAP 89) Part 2: Propagation, IEE, pp. 150-154 (April 4-7, 1989). Vilar, E. et al., "Experimental System and Measurements of Transhorizon Signal Levels at 11 Ghz." 18th AR <u>45</u> European Microwave Conference, Microwave Exhibitions and Publishers Ltd., pp. 429-435 (September 12 - 15, 1988). **EXAMINER** DATE CONSIDERED 4/28/06

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in

conformance and not considered. Include copy of this form with next communication to Applicant.

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Page 46 of 58 ATTY. DOCKET NO. APPLICATION NO. 1744.0020007 10/086,367 FORM PTO-1449 **APPLICANTS** Sorrells et al. TION DISCLOSURE STATEMENT FILING DATE GROUP March 4, 2002 2682 **U.S. PATENT DOCUMENTS EXAMINER** INITIAL **DOCUMENT** DATE NAME **CLASS** SUB-FILING DATE NUMBER CLASS 1/2 **AA46** 5.319.799 06/1994 Morita **AB46** 5,801,654 09/1998 Traylor AC46 5,369,404 11/1994 Galton AD46 3,716,730 02/1973 Cerny, Jr. AE46 4,080,573 03/1978 Howell AF46 4,334,324 06/1982 Hoover AG46 4,369,522 01/1983 Cerny, Jr. et al. Technology Center 2600 **AH46** 5,465,418 11/1995 Zhou et al. <del>-3</del>22 **AI46** 5,513,389 04/1996 Reeser et al. **FOREIGN PATENT DOCUMENTS EXAMINER** INITIAL **DOCUMENT NUMBER** DATE COUNTRY **CLASS TRANSLATION** SUB-CLASS AJ Yes No ΑK Yes No AL Yes No AM Yes No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Vilar, E. and Matthews, P.A., "Importance of Amplitude Scintillations in Millimetric Radio Links," *Proceedings of the 4th European Microwave Conference*, Microwave Exhibitions and Publishers, pp. 202-206 (September 10-13, 络 AN <u>46</u> 1974). Vilar, E. and Haddon, J., "Measurement and Modeling of Scintillation Intensity to Estimate Turbulence AO Parameters in an Earth-Space Path," IEEE Transactions on Antennas and Propagation, IEEE Antennas and <u>46</u> Propagation Society, Vol. AP-32, No. 4, pp. 340-346 (April 1984). Vilar, E. and Matthews, P.A., "Measurement of Phase Fluctuations on Millimetric Radiowave Propagation," Electronics Letters, IEE, Vol. 7, No. 18, pp. 566-568 (September 9, 1971). AP <u>46</u> Vilar, E. and Wan, K.W., "Narrow and Wide Band Estimates of Field Strength for Indoor Communications in the AQ Millimetre Band," Electronics Division Colloquium on Radiocommunications in the Range 30-60 Ghz, IEE, pp. <u>46</u> 5/1-5/8 (January 17, 1991). Vilar, E. and Faulkner, N.D., "Phase Noise and Frequency Stability Measurements. Numerical Techniques and 58 Limitations,\* Electronics Division Colloquium on Low Noise Oscillators and Synthesizer, IEE, 5 pages (January AR 46 23, 1986). **EXAMINER DATE CONSIDERED** 

ATTY. DOCKET NO. APPLICATION NO. 1744.0020007 10/086,367 FORM PTO-1449 APPLICANTS Sorrells et al. TION DISCLOSURE STATEMENT GROUP FILING DATE March 4, 2002 2682 **U.S. PATENT DOCUMENTS EXAMINER DOCUMENT** INITIAL DATE NAME **CLASS** SUB-FILING DATE NUMBER **CLASS AA47** 5,959,850 09/1999 Lim **AB47** 5,157,687 10/1992 Tymes AC47 5,945,660 08/1999 Nakasuji et al. AD47 6,091,939 07/2000 Banh **AE47** 6,091,941 07/2000 Moriyama et al. **AF47** 6,098,886 08/2000 Swift et al. **AG47** 6,215,475 B1 Meyerson et al. 04/2001 **AH47** 6,049,706 04/2000 Cook et al. SB **AJ47** 6,061,551 05/2000 Sorrells et al. **FOREIGN PATENT DOCUMENTS EXAMINER DOCUMENT NUMBER** DATE COUNTRY CLASS TRANSLATION INITIAL SUB-**CLASS** AJ Yes No ΑK Yes No AL Yes No AM Yes No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Vilar, E. and Senin, S., "Propagation phase noise identified using 40 Ghz satellite downlink," Electronics Letters, AN <u>47</u> IEE, Vol. 33, No. 22, pp. 1901-1902 (October 23, 1997). Vilar, E. et al., "Scattering and Extinction: Dependence Upon Raindrop Size Distribution in Temperate (Barcelona) and Tropical (Belem) Regions," *Tenth International Conference on Antennas and Propagation*, Electronics Division of the IEE, pp. 2.230-2.233 (April 14-17, 1997). AO <u>47</u> Vilar, E. and Haddon, J., "Scintillation Modeling and Measurement - A Tool for Remote-Sensing Slant Paths," AΡ <u>47</u> AGARD Conference Proceedings No. 332: Propagation Aspects of Frequency Sharing, Interference And System Diversity, AGARD, pp. 27-1 - 27-13 (October 18-22, 1982). Vilar, E., "Some Limitations on Digital Transmission Through Turbulent Atmosphere," International Conference AQ on Satellite Communication Systems Technology, Electronics Division of the IEE, pp. 169-187 (April 7-10, <u>47</u> 1975). Vilar, E. and Matthews, P.A., "Summary of Scintillation Observations in a 36 Ghz Link Across London," International Conference on Antennas and Propagation Part 2: Propagation, IEE, pp. 36-40 (November 28-30, AR 47 1978). **EXAMINER DATE CONSIDERED** EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in

conformance and not considered. Include copy of this form with next communication to Applicant.

ATTY. DOCKET NO. APPLICATION NO. 1744.0020007 10/086,367 FORM PTO-1449 APPLICANTS PARA TRADE Sorrells et al. TION DISCLOSURE STATEMENT FILING DATE GROUP March 4, 2002 2682 **U.S. PATENT DOCUMENTS EXAMINER DOCUMENT** INITIAL DATE NAME **CLASS** SUB-FILING DATE NUMBER CLASS **AA48** 6,061,555 05/2000 Bultman et al. **AB48** 6,091,940 07/2000 Sorrells et al. AC48 6,266,518 B1 07/2001 Sorrells et al. AD48 03/2002 Sorrells et al. 6,353,735 B1 AE48 6,370,371 B1 04/2002 Sorrells et al. 5,628,055 AF48 05/1997 Stein 10/1997 Fournier AG48 5,678,220 Lechnology Cehter 2600 **AH48** 5,926,065 07/1999 Wakai et al. 51 **AJ48** 3,622,885 11/1971 Oberdorf et al. **FOREIGN PATENT DOCUMENTS EXAMINER DOCUMENT NUMBER** INITIAL DATE COUNTRY **CLASS** TRANSLATION SUB-**CLASS** AJ Yes No AK Yes No AL Yes No AM Yes No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Vilar, E. et al., "Wideband Characterization of Scattering Channels," Tenth International Conference on Antennas and Propagation, Electronics Division of the IEE, pp. 2.353-2.358 (April 14-17, 1997). AN <u>48</u> Vollmer, A., "Complete GPS Receiver Fits on Two Chips," *Electronic Design*, Penton Publishing, pp. 50, 52, 54 and 56 (July 6, 1998). AO <u>48</u> Voltage and Time Resolution in Digitizing Oscilloscopes: Application Note 348, Hewlett Packard, pp. 1-11 AP <u>48</u> (November 1986). Wan, K.W. et al., "A Novel Approach to the Simultaneous Measurement of Phase and Amplitude Noises in ΑQ Oscillator," Proceedings of the 19th European Microwave Conference, Microwave Exhibitions and Publishers <u>48</u> Ltd., pp. 809-813 (September 4-7, 1989). Wan, K.W. et al., "Extended Variances and Autoregressive/Moving Average Algorithm for the Measurement and Synthesis of Oscillator Phase Noise," Proceedings Of the 43rd Annual Symposium on Frequency Control, IEEE, AR 48 pp. 331-335 (1989). **EXAMINER DATE CONSIDERED** 

Page 49 of 58 APPLICATION NO. ATTY. DOCKET NO. 1744.0020007 10/086,367 FORM PTO-1449 **APPLICANTS** Sorrells et al. TION DISCLOSURE STATEMENT GROUP FILING DATE 2682 March 4, 2002 **U.S. PATENT DOCUMENTS EXAMINER** DOCUMENT INITIAL DATE NAME **CLASS** SUB-FILING DATE NUMBER CLASS **AA49** 4,483,017 11/1984 Hampel et al. **AB49** 6,421,534 B1 07/2002 Cook et al. AC49 6,330,244 B1 12/2001 Swartz et al. **AD49** 4,384,357 05/1983 deBuda et al. AE49 Williams 4,470,145 09/1984 2003 5,600,680 <del>DLU</del> I **AF49** 02/1997 Mishima et al. 5,606,731 **AG49** 02/1997 Pace et al. Technology Center 2000 **AH49** 5,870,670 02/1999 Ripley et al. ያ⁄ኢ Al49 6,314,279 B1 11/2001 Mohindra **FOREIGN PATENT DOCUMENTS EXAMINER** INITIAL **DOCUMENT NUMBER** COUNTRY CLASS SUB-**TRANSLATION** CLASS AJ Yes No AK Yes No AL Yes No AM Yes No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Wan, K.W. et al., "Wideband Transhorizon Channel Sounder at 11 Ghz," Electronics Division Colloquium on B High Bit Rate UHF/SHF Channel Sounders - Technology and Measurement, IEE, pp. 3/1-3/5 (December 3, AN <u>49</u> 1993). Wang, H., "A 1-V Multigigahertz RF Mixer Core in 0.5 -  $\mu$ m CMOS," IEEE Journal of Solid-State Circuits, IEEE Solid-State Circuits Society, Vol. 33, No. 12, pp. 2265-2267 (December 1998). AO 49 Watson, A.W.D. et al., "Digital Conversion and Signal Processing for High Performance Communications AP <u>49</u> Receivers," Digital Processing of Signals in Communications, Institution of Electronic and Radio Engineers, pp. 367-373 (April 22nd -26th, 1985). Weast, R.C. et al. (Ed.), Handbook of Mathematical Tables, Second Edition, The Chemical Rubber Co., pp. 480-ΑQ <u>49</u> 485 (1964). Da Wiley, R.G., "Approximate FM Demodulation Using Zero Crossings," IEEE Transactions on Communications, AR <u>49</u> IEEE, Vol. COM-29, No. 7, pp. 1061-1065 (July 1981). **EXAMINER** DATE CONSIDERED 7/20106

Page 50 of 58 ATTY. DOCKET NO. APPLICATION NO. 1744.0020007 10/086,367 FORM PTO-1449 APPLICANTS Sorrells et al. TION DISCLOSURE STATEMENT THADE FILING DATE GROUP March 4, 2002 2682 **U.S. PATENT DOCUMENTS EXAMINER** INITIAL **DOCUMENT** NAME CLASS DATE SUB-FILING DATE NUMBER **CLASS AA50** 5,633,815 05/1997 Young AB50 3,246,084 04/1966 Kryter AC50 3,702,440 11/1972 Moore AD50 3,767,984 10/1973 Shinoda et al. Shen AE50 3,852,530 12/1974 AF50 4,220,977 09/1980 Yamanaka AG50 5,016,242 05/1991 Tang **AH50** 5,937,013 08/1999 Lam et al. 5/3 A150 6,014,551 01/2000 Pesola et al. **FOREIGN PATENT DOCUMENTS EXAMINER** INITIAL DOCUMENT NUMBER DATE COUNTRY **CLASS** SUB-TRANSLATION **CLASS** AJ No AK Yes No AL Yes No AM Yes No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) AN <u>50</u> SB Worthman, W., "Convergence... Again," RF Design, Primedia, p. 102 (March 1999). Young, I.A. and Hodges, D.A., "MOS Switched-Capacitor Analog Sampled-Data Direct-Form Recursive Filters," AO <u>50</u> IEEE Journal of Solid-State Circuits, IEEE, Vol. SC-14, No. 6, pp. 1020-1033 (December 1979). Translation of Specification and Claims of FR Patent No. 2245130, 3 pages (April 18, 1975- Date of publication AΡ <u>50</u> of application). Fest, Jean-Pierre, "Le Convertisseur A/N Revolutionne Le Recepteur Radio," Electronique, JMJ (Publisher), No. AQ <u>50</u> 54, pp. 40-42 (December 1995). Eg. Translation of DE Patent No. 35 41 031 A1, 22 pages (May 22, 1986- Date of publication of application). AR <u>50</u>

**EXAMINER:** Initial if reference considered) whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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conformance and not considered. Include copy of this form with next communication to Applicant.

Page 52 of 58 ATTY. DOCKET NO. APPLICATION NO. 1744.0020007 10/086,367 FORM PTO-1449 APPLICANTS Sorrells et al. TION DISCLOSURE STATEMENT A THADER FILING DATE GROUP 2682 March 4, 2002 **U.S. PATENT DOCUMENTS EXAMINER** INITIAL DOCUMENT DATE NAME CLASS SUB-FILING DATE NUMBER CLASS **AA52** 5,898,912 04/1999 Heck et al. **AB52** 4,660,164 04/1987 Leibowitz AC52 6,580,902 B1 06/2003 Sorrells et al. AD52 4,857,928 08/1989 Gailus et al. **DEC 115** 2003 AE52 5,389,839 02/1995 Heck AF52 5,471,665 11/1995 Pace et al. lechnology Center 2500 **AG52** 6,327,313 B1 12/2001 Traylor et al. AH52 5,751,154 05/1998 Tsugai 5/2 **AI52** 5,793,817 08/1998 Wilson **FOREIGN PATENT DOCUMENTS EXAMINER** INITIAL **DOCUMENT NUMBER** COUNTRY CLASS SUB-TRANSLATION CLASS AJ Yes No AK Yes No AL Yes No AM Yes No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Rabiner, L.R. and Gold, B., Theory And Application Of Digital Signal Processing, Prentice-Hall, Inc., pp. v-xii and AN <u>52</u> 40-46 (1975). English-language Abstract of Japanese Patent Publication No. 08-032556, from http://www1.ipdl.jpo.go.jp, 2 AO <u>52</u> Pages (February 2, 1996 - Date of publication of application). English-language Abstract of Japanese Patent Publication No. 08-139524, from http://www1.ipdl.ipo.go.jp, 2 AP <u>52</u> Pages (May 31, 1996 - Date of publication of application). English-language Abstract of Japanese Patent Publication No. 59-144249, from http://www1.ipdl.jpo.go.jp, 2 AQ <u>52</u> Pages (August 18, 1984 - Date of publication of application). 5B English-language Abstract of Japanese Patent Publication No. 63-054002, from http://www1.ipdl.jpo.go.jp, 2 AR <u>52</u> Pages (March 8, 1988 - Date of publication of application). **EXAMINER DATE CONSIDERED** 

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in

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54	5B		6,22	6,225,848 B1		05/2001		y et al.					
		AA53 AB53		13,685 B1	11/20	.001	Rabii	· · · · · · · · · · · · · · · · · · ·	1-		<del> </del>		
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53	3	AI53	5,790,587		08/1998		Smit	th et al.			+=_		
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AO 53 English-language Abstract of Japanese Patent Publication No. 08-023359, Pages (January 23, 1996 - Date of publication of application).									359, from http://www1.ipdl.jpo.go.jp, 2				
	AP 53 Translation of Japanese Patent Publication No. 47-2314, 7 pages (February 4, 1972- Date of publication).										ublication of		
		AQ	<u>53</u>	Partial Translation of Japanese Patent Publication No. 58-7903, 3 pages (January 17, 1983- Date of publication of application).									
5/3	}	AR	<u>53</u>	English-langu Pages (Augus	age A st 8, 1	bstract of Ja 993 - Date o	panes f publi	e Patent Publication No. 5 cation of application).	58-133004	, from h		11.jpo.go.jp, 2	
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Page 54 of 58 ATTY. DOCKET NO. APPLICATION NO. 1744.0020007 10/086,367 FORM PTO-1449 **APPLICANTS** Sorrells et al. MATION DISCLOSURE STATEMENT FILING DATE GROUP March 4, 2002 2682 **U.S. PATENT DOCUMENTS EXAMINER DOCUMENT** INITIAL DATE NAME CLASS SUB-FILING DATE NUMBER **CLASS** AA54 513 4,740,675 04/1988 Brosnan et al. **AB54** 5,483,600 01/1996 Werrbach AC54 6,011,435 01/2000 Takeyabu et al. DEC 1 5 2003 AD54 6,321,073 B1 11/2001 Luz et al. AE54 6,026,286 02/2000 Long Technology Center 2600 AF54 6,178,319 B1 01/2001 Kashima AG54 6,634,555 B1 Sorrells et al. 10/2003 **AH54** 3,736,513 05/1973 Wilson AI54 4,488,119 12/1984 Marshall **FOREIGN PATENT DOCUMENTS EXAMINER** INITIAL DOCUMENT NUMBER DATE COUNTRY CLASS TRANSLATION SUB-**CLASS** ΑJ No AK Yes No AL Yes No AM Yes No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) English-language Abstract of Japanese Patent Publication No. 60-058705, from http://www1.ipdl.jpo.go.jp, 2 AN <u>54</u> Pages (April 4, 1985 - Date of publication of application). English-language Abstract of Japanese Patent Publication No. 04-123614, from http://www1.ipdl.jpo.go.jp, 2 AO <u>54</u> Pages (April 23, 1992 - Date of publication of application). English-language Abstract of Japanese Patent Publication No. 04-127601, from http://www1.ipdl.jpo.go.jp, 2 AP <u>54</u> Pages (April 28, 1992 - Date of publication of application). English-language Abstract of Japanese Patent Publication No. 05-175730, from http://www1.ipdl.jpo.go.jp, 2 AQ <u>54</u> Pages (July 13, 1993 - Date of publication of application).

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**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

Pages (July 13, 1993 - Date of publication of application).

English-language Abstract of Japanese Patent Publication No. 05-175734, from http://www1.ipdl.jpo.go.jp, 2

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247	AA55	4,63	33,510 12/1		986	Suzi	Suzuki et al.					
1	AB55	5,36	5,369,789		11/1994		Kosugi et al.			-11/1-		
	AC55	5,41	5,416,449		05/1995		Joshi		<del>                                     </del>	5 2003 Center 2600		
	AD55	5,438,329 6,611,569 B1 6,647,250 B1		08/1995 08/2003 11/2003		Gastouniotis et al. Schier et al. Bultman et al.						
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age .	AN	<u>55</u>	English-language Abstract of Japanese Patent Publication No. 07-154344, from http://www1.ipdl.jpo.go.jp, 2 Pages (June 16, 1995 - Date of publication of application).									
	AO	<u>55</u>	English-language Abstract of Japanese Patent Publication No. 07-307620, from http://www1.ipdl.jpo.go.jp, 2 Pages (November 21, 1995 - Date of publication of application).									
	AP	<u>55</u>	Oppenheim, A.V. and Schafer, R.W., Digital Signal Processing, Prentice-Hall, pp. vii-x, 6-35, 45-78, 87-121 and 136-165 (1975).									
AQ 55 English-tanguage Abstract of Japanese Patent Publication No. 55-066057, from http://www1. Pages (May 19, 1980 - Date of publication of application).									nttp://www1.ip	dl.jpo.go.jp, 2		
50	AR	AR  English-language Abstract of Japanese Patent Publication No. 63-065587, from http://www1.ipdl.jpo.go.jp, 2 Pages (March 24, 1988 - Date of publication of application).										
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Page 56 of 58 ATTY. DOCKET NO. APPLICATION NO. 1744.0020007 10/086,367 FORM PTO-1449 **APPLICANTS** Sorrells et al. RMATION DISCLOSURE STATEMENT FILING DATE GROUP March 4, 2002 2682 **U.S. PATENT DOCUMENTS EXAMINER** INITIAL **DOCUMENT** DATE NAME SUB-FILING DATE **CLASS** NUMBER **CLASS** AA AB AC AD AE DEC 1 5 2003 AF Technology Center 2600 AG AH ΑI **FOREIGN PATENT DOCUMENTS EXAMINER** INITIAL **DOCUMENT NUMBER** DATE COUNTRY **CLASS** SUB-TRANSLATION **CLASS** AJ No ΑK Yes No AL Yes No AM Yes No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) English-language Abstract of Japanese Patent Publication No. 63-153691, from http://www1.ipdl.jpo.go.jp, 2 AN <u>56</u> 58 Pages (June 27, 1988 - Date of publication of application). Translation of Japanese Patent Publication No. 60-130203, 3 pages (July 11, 1985- Date of publication of AO <u>56</u> application). Razavi, B., "A 900-MHz/1.8-Ghz CMOS Transmitter for Dual-Band Applications," Symposium on VLSI Circuits AP <u>56</u> Digest of Technical Papers, IEEE, pp. 128-131 (1998). Ritter, G.M., "SDA, A New Solution for Transceivers," 16th European Microwave Conference, Microwave AQ <u>56</u> Exhibitions and Publishers, pp. 729-733 (September 8, 1986).

**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

Date of publication of application).

DIALOG File 351 (Derwent WPI) English Language Patent Abstract for FR 2 669 787, 1 page (May 29, 1992-

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**EXAMINER** 

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	AO	<u>57</u>	Patel, M. et al., "Bandpass Sampling for Software Radio Receivers, and the Effect of Oversampling on Aperture Jitter," VTC 2002, IEEE, pp. 1901-1905 (2002).										
	AP 57 English-language Abstract of Japanese Patent Publication No. 61-030821, from http://www1.ipdl.jp									odl.jpo.go.jp, 2			
	AQ	<u>57</u>	English-langu Pages (Decer	age A	bstract of Ja 10, 1993 - Da	panes ate of p	e Patent Publication No publication of application	o. 05-327356 n).	, from h	ttp://www1.ij	od!.jpo.go.jp, 2		
508	AR	<u>57</u>	Tayloe, D., "A Business Mag	Low-	noise, High- s & Media, h	perfori nc., pp	nance Zero IF Quadrat 5. 58, 60, 62 and 69 (Ma	ure Detector/ arch 2003).	Preamp	lifier," RF D	esign, Primedia		
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conformance and not considered. Include copy of this form with next communication to Applicant.